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THE MEDICAL AND SURGICAL KNOWLEDGE OF WILLIAM SHAKSPERE

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THE
MEDICAL AND SURGICAL KNOWLEDGE
OF WILLIAM SHAKSPERE

AUTHOR'S EDITION

This is the Author's Edition, limited to two hundred registered and numbered copies, of which this copy is

NUMBER 179

"Believe me, I speak as my understanding instructs me, and as my honesty puts it to utterance."

John H. Wainwright

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THE first folio edition of Shakspere's plays was edited and issued by two of Shakspere's theatrical colleagues, Heming and Condell, in 1623, in which was included an engraving of the author by a young artist, Martin Droeshout. Ben Jonson, who was Shakspere's intimate friend and companion, declared the engraving to be an accurate likeness—in fact, praised it highly. It was at that time accepted as a good portrait. The original painting from which this engraving was made disappeared and remained in obscurity until 1892, when Mr. Edgar Flower, of Stratford-on-Avon, discovered in the possession of a Mr. H. C. Clements, at Peckham Rye, a portrait which so much resembles that of the engraving mentioned as having appeared in the folio edition, as to leave no doubt but that it was the original. The portrait was faded and worm eaten, but, without question, dated from the beginning of the seventeenth century. It had been painted on a panel, made by joining two pieces of elm wood, and in the upper left-hand corner was the inscription, William Shakspere, 1609.

Mr. Clements had purchased the portrait from an obscure dealer in 1840, but, knowing nothing of its history except what was noted on a slip of paper when he made the purchase, he pasted on the box in which the portrait was shipped the following: "The original portrait of Shakspere from which the Droeshout engraving was made and inserted in the first collected edition of his works, published in 1623, being seven years after his death. The picture was painted seven years before the death of Shakspere and consequently fourteen years before the engraving was published." This portrait was publicly exhibited in London, where thousands inspected it. In all the details, the portrait is identical with the engraving.

There seems good grounds for believing this portrait, therefore, one of Shakspere, painted during his lifetime, when about fifty-five years of age, and the only one painted during his lifetime known to exist.

Upon the death of Mr. Clements in 1895, the portrait was purchased by Mrs. Charles Flower and presented to the Memorial Picture Gallery at Stratford, where it now hangs.

The photogravure contained in this volume is from a photograph of the original: no attempt has been made to restore it, but it has been left as it now appears. The natural decay of the wood upon which it was painted is clearly shown.

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THE MEDICAL AND SURGICAL KNOWLEDGE OF *WILLIAM SHAKSPERE*

With Explanatory Notes

BY

JOHN W. WAINWRIGHT, M.D.

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1907

GENERAL

Copyright, 1906
BY JOHN W. WAINWRIGHT, M. D.

To Her, my companion for fifteen years; my inspiration, my critic; whose irreparable loss is accentuated from year to year, this small volume is dedicated with a continued and growing affection, by him whom she *Loved the best of all.*

THE AUTHOR

187738

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FOREWORD

The knowledge of science, art and literature displayed in Shakspere's works has been the theme for many essays. Perhaps no other work has received so much attention from scholars, and if words were alone necessary to determine his rank among poets and dramatists certainly nothing further need be said.

Of the biographies, reviews, essays and criticisms there is no end. We are content to leave these, however, to such illustrious writers as Johnson, Spencer, Coleridge, Dowden, Malone, Hazlitt, Collier, Mrs. Jamison and others, ourselves directing the readers' attention to the many evidences presented of his knowledge of medicine and its collateral branches. Much threshing discloses the perfect grain, and perchance we may be so fortunate as to help make clear to the occasional reader of Shakspere references obscure or not otherwise observed.

The quotations given will occasionally differ from those contained in the expurgated or stage editions so commonly made use of, while others will appear which are not familiar perhaps to the reader. They have been taken from an edition in the writer's possession printed in 1796 by Bellamy and Roberts, London, now unfortunately out of print, and from a more modern one by Charles Knight, both of which give the plays as they appeared in the "original copies of the first folio edition of 1623."

Let it be understood that all the references relating to medicine are by no means given, but only such as are of greater interest. In some instances the meaning may seem obscure. Then matter is introduced which cannot be considered strictly medical, to render the quotations more clear, not only to the medical man, but to the layman into whose hands the book may come.

If the writer shall succeed in helping to create a greater interest in the writings of Shakspere he will feel amply rewarded for his efforts, a labor of love.

INTRODUCTION

It would be out of place in such a work as this to give but a brief outline of what is known as Shakspere's life. I refer those in search of such information to the numerous works giving, most of them, a so-called "Life of Shakspere."

Briefly, he attended a grammar school until fourteen years of age; from that age to eighteen we know nothing of his life. It is as reasonable, however, to believe that he was actively engaged in improving his mind, as it is that he was less honorably employed. His later achievements bear out this belief, for the mind that conceived the works bearing his name could never have been idle or otherwise employed than in the acquisition of knowledge. Rowe's history of Shakspere, containing assumptions since disproved, is largely responsible for the uncomplimentary sayings and beliefs which have found place in the minds of some. Personal views are there too persistently forced upon us. In the absence of well-authenticated facts we are not warranted in assuming ill of one, albeit to one unprejudiced, enough is known to establish our Shakspere as entitled to a full measure of our esteem, love and gratitude.

Shakspere, mentally, was the master of all time. The whole range of human knowledge and passion from science, anticipating research, to law and theology, is within his grasp. He portrays the villainies of the most atrocious, sounding depths amazing, equally as artistically as he carries us up and up, and then still farther up, that we may view the noblest characters ever painted by man. Each character is made perfect and sufficient, the pictures being so real, that they assume the place of friends in real life who, perhaps, have passed away in the flesh, but whose presence seemingly remains with us. We have Hamlet and Lear, Ophelia and Juliet, as well as Iago, Macbeth, Richard III. and King John, the alpha and omega of humanity. Each character, as I have said,

is sufficient, and therein we stand in awe with hat in hand before this man who could so lose himself as to leave no trace of self. If it is, as I believe true, that an individual cannot give character to another without having the essence of that same character in himself, then what prodigious learning, what infinite versatility!

It is claimed that Shakspere had surely studied law; that he must have been a close student of theology; indeed, an academician, to possess such knowledge as he displays of mathematics, astronomy and literature. We may with equal certainty claim that he had been a student of medicine, and yet I can find no evidence that he ever was. It is reasonably certain that he was accustomed to associate with all classes of men and women; that he was a keen observer, had an exceptionally retentive memory, sought knowledge from whatever source, could intuitively grasp a thought and put it to immediate use, mentally finish what was only begun by others. All people with whom he came in contact contributed to his knowledge, unconsciously, perhaps, more often than otherwise. He learned from all stations of life, from the Court to the gutter.

Regarding the spelling of the Master's name as used in this volume, I have only to quote as follows from Knight's Life of Shakspere:

"Malone in his 'Inquiry,' published in 1796, makes the following confession: 'In the year 1776 Mr. Steevens, in my presence, traced with the utmost accuracy the three signatures affixed by the poet to his will. While two of these manifestly appeared to us Shakspere, we conceived that in the third there was a variation, and that in the second syllable an *a* was found. Accordingly we have constantly so exhibited the poet's name ever since that time. It ought certainly to have struck us as a very extraordinary circumstance, that a man should write his name twice one way, and once another, on the same paper; however, it did not; and I had no suspicion of our mistake till, about three years ago, I received a very sensible letter from an anonymous correspondent, who showed me very clearly that, though there was a superfluous stroke where the poet came to write the letter *r* in his last signature—probably from the tremor of his hand—there was no *a* discoverable in that syllable; and that his name, like both the others, was written 'Shakspere.'" Revolving this matter in my mind, *it occurred to me, that in the new facsimile of*

his name which I gave in 1790, *my engraver had made a mistake in placing an a over the name which was there exhibited,* and that what was supposed to be that letter was only a mark of abbreviation, with a turn curl at the first part of it, which gave it the appearance of a letter.

If Mr. Steevens and I had maliciously intended to lay a trap for this fabricator to fall into, we could not have done the business more adroitly. The new facsimile continued to be given with an *a* over the name in subsequent editions. It was taken from the mortgage deed executed by Shakspere on the 11th of March, 1613. Malone continues:

"Notwithstanding this, I shall continue to write our poet's name Shakspere. But whether I am doing right or wrong, it is manifest that he wrote it himself *Shakspere.*"

An autograph was found in a small folio volume, the first edition of Florio's translation of Montaigne, and purchased at auction in 1838 by the British Museum, in which the poet had written his name Shakspere.

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THE MEDICAL AND SURGICAL KNOWLEDGE OF WILLIAM SHAKSPERE

Caliban. All the infections that the sun sucks up
From bogs, fens, flats, on Prosper fall, and make him
By inch-meal a disease.

—*Tempest, Act. II., Sc. 2.*

"By inch-meal a disease" is rather a severe penalty to be invoked on Prosper for displeasing Caliban. This passage shows that the Master was familiar with the malarial cachexia, which so insidiously takes possession of those exposed.

Stephano. This is some monster of the isle, with four legs; who hath got, as I take it, an ague: Where the devil should he learn our language? I will give him some relief, if it be but for that: If I can recover him and keep him tame, and get to Naples with him, he's a present for any emperor that ever trod on neat's-leather.

—*Tempest, Act. II., Sc. 2.*

Shakspere gives many references to malaria or ague and to the various stages or phases of the disease. In the above quotation we have delirium accompanying the fever.

Patroclus. O, then beware;
Those wounds heal ill that men do give themselves:
Omission to do what is necessary
Seals a commission to a blank of danger;
And danger, like an ague, subtly taints
Even then when we sit idly in the sun.

—*Troilus and Cressida, Act III., Sc. 3.*

It is well known that those suffering from malaria can bring on a chill by sitting in the sun.

Constance. But now will canker sorrow eat my bud,
And chase the native beauty from his cheek,
And he will look as hollow as a ghost,
As dim and meagre as an ague's fit;
And so he'll die;——
* * * * * * * *
Grief fills the room up of my absent child.

Pandulph. Before the curing of a strong disease,
Even in the instant of repair and health,
The fit is strongest.

—*King John, Act II., Sc. 4.*

Mistress Overdone. Thus, what with the war, what with the sweat,
What with the gallows, and what with poverty,
I am Custom-shrunk.

—*Measure for Measure, Act I., Sc. 2.*

Sweating sickness, the ague with which there is usually much sweating after the fever.

Macbeth. Hang out our banners on the outward walls;
The cry is still "They come." Our castle's strength
Will laugh a siege to scorn: here let them lie,
Till famine, and the ague, eat them up.

—*Macbeth, Act V., Sc. 5.*

The besiegers were evidently in a malarious country and unprotected from the source of infection. By prolonging the siege the besiegers would become fever stricken, lose strength and be unable to successfully attack the castle.

Rosalind. ———, for he seems to have the quotidian of love upon him.

—*As You Like It, Act III., Sc. 2.*

Mrs. Quickly. As ever you came of women, come in quickly to Sir John: Ah, poor heart! he is so shaked of a burning fever, quotidian tertian, that it is most lamentable to behold.

Pistol. His heart is fracted and corroborate.

—*King Henry Fifth, Act II., Sc. 1.*

The Hostess (formely Mistress Quickly, now wife to Pistol) gets rather mixed in her description of Sir John's (Falstaff's) illness. She jumbles together quotidian and tertian in utter ignorance of their meaning. However, it would seem that Sir John was suffering from malarial fever, for just previous to this appeal for help the boy conjures Bardolph to "put his face between his sheets and do the office of a warming pan" (Sir John was having a chill), while now he is "shaked of a burning" (fever).

"Fracted" means broken. The word is also used in this sense in "Timon of Athens." I am at a loss to find a meaning in this connection for "corroborate."

Mrs. Quickly. 'A made a finer end and went away an it had been any christom child; 'a parted even just between twelve and one, e'en at turning o' the tide; for after I saw him fumble with the sheets, and play with flowers, and smile upon his fingers' ends, I knew there was but one way; for his nose was as sharp as a pen, and 'a babbled of green fields.

* * * * * * * * * * * * *

So 'a bade me lay more clothes on his feet; I put my hand into the bed and felt them, and they were as cold as any stone; then I felt to his knees, and so upward and upward, and all was as cold as any stone.

—*King Henry Fifth, Act II., Sc. 3.*

We are to understand "finer end" to mean fine end. Christom refers to the custom of placing upon children a white vesture to be worn for a month after baptism. There was, in olden times, the belief that no one died excepting at ebbtide. The fumbling with the sheets, playing with flowers, and babbling of green fields sounds much like the *status typhosus,* although the Hostess declared that Sir John (Falstaff) "is so shaked of a burning fever, quotidian tertian," etc.; but her diagnosis should not count for much.

Biron. A fever in your blood! why, then incision
Would let her out in saucers;—

—*Love's Labor Lost, Act IV., Sc. 3.*

All medical men will know that bleeding for fevers was universally practiced until within recent years, and was accepted and largely made use of in Shakspere's time. In addition to the depletion from bleeding, the poor patient with fever must also be starved.

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Lennox. Clamor'd the live-long night: some say the earth was feverous and did shake.

—*Macbeth, Act II., Sc. 3.*

Antony. The white hand of a lady fever thee,
Shake thou to look on't.

—*Antony and Cleopatra, Act III., Sc. 3.*

Raise of bodily temperature from emotion or embarrassment.

Troilus. Even such a passion doth embrace my bosom:
My heart beats quicker than a feverous pulse;

—*Troilus and Cressida, Act III., Sc. 2.*

Acceleration of the pulse which accompanies fever.

Timon. ———. Plagues incident to men,
Your potent and infectious fevers heap
On Athens, ripe for stroke! thou cold sciatica
Cripple our senators, that their limbs may halt
As lamely as their manners! lust and liberty
Creep in the minds and marrows of our youth;
That 'gainst the stream of virtue they may strive,
And drown themselves in riot! Itches, blains,
Sow all the Athenian bosoms; and their crop
Be general leprosy! Breath infect breath;
That their society, as their friendship, may be merely poison!

—*Timon of Athens, Act IV., Sc. 1.*

Timon is hardly less an adept than Thersites in curses, while his supply of ills is most marvellous. Here is imagination run wild. Place beside this quotation the frightful material with which the witches compound their broth (Macbeth, Act IV., Sc. 1) and one is amazed.

Scarus. On our side, like the token'd pestilence
When death is sure.

—*Antony and Cleopatra, Act III., Sc. 8.*

I believe the Master here refers to what is known as the bubonic plague.

Caius Marcius. All the contagion of the south light on you,
You shames of Rome!—you herd of—Boils and plagues
Plaster you o'er; that you may be abhorr'd
Further than seen, and one infect another
Against the wind a mile! You souls of geese
That bear the shapes of men,—

—*Coriolanus, Act I., Sc. 4.*

Contagious diseases are still thought to emanate from the south, *i.e.,* near the equator.

Volumnia. Now the red pestilence strike all trades in Rome
And occupation perish!

—*Coriolanus, Act IV., Sc. 1.*

The red pestilence or typhus fever.

Caliban. You taught me language; and my profit on't
Is, I know how to curse: The red plague rid you,
For learning me your language!

—*Tempest, Act I., Sc. 2.*

Typhus fever or the red-plague is known to have been common in England as well as in France during Shakspere's time. In France it was called *La pourpre,* the red plague, from the eruption which accompanies the disease.

Biron. Thus pour the stars down plagues for perjury.

—*Love's Labor Lost, Act V., Sc. 2.*

The stars in Shakspere's time and earlier were thought to influence plagues and epidemics.

King Henry. And draw their honours reeking up to heaven;
Leaving their earthly parts to choke your clime,
The smell whereof shall breed a plague in France.

—*King Henry Fifth, Act IV., Sc. 3.*

This is a very severe arraignment of the honor of the French people—that it was no more than vapor to be "drawn reeking" into the atmosphere. The last two lines need no comment.

Adrian. The air breathes upon us here most sweetly.

Sebastian. As if it had lungs, and rotten ones.

—*Tempest, Act II., Sc. 1.*

King. ———; The rest have worn me out
With several applications;—nature and sickness
Debate it at their leisure.

—*All's Well That Ends Well, Act I., Sc. 2.*

Carefully noting the whole of this scene the reader will find that the King was suffering from emphysema.

Coriolanus. How! no more?
As for my country I have shed my blood,
Not fearing outward force, so shall my lungs
Coin words 'till their decay, against these measles,
Which we disdain should tetter us, yet sought
The very way to catch them.

—*Coriolanus, Act III., Sc. 1.*

I do not doubt that the measles here referred to was identical with the disease as it prevails to-day. The reader will note that infection was recognized.

Gonzalo. There were mountaineers, dew-lapp'd like bulls, whose throats had hanging at them wallets of flesh.

—*Tempest, Act III., Sc. 3.*

This is unmistakable reference to goiter and its prevalence in those who dwell in mountainous regions.

Page. And youthful still, in your doublet and hose, this raw rheumatic day.

—*Merry Wives of Windsor, Act III., Sc. 2.*

Rosalind. With a priest that lacks latin, and a rich man that hath not the gout: for the one sleeps easily, because he cannot study; and the other lives merrily, because he feels no pain.

—*As You Like It, Act III., Sc. 2.*

Posthumus. Yet am I better
Than one that's sick o' the gout: since he had rather
Groan so in perpetuity, than be cur'd
By the sure physician, death, who is the key
To unbar these locks.

—*Cymbeline, Act V., Sc. 4.*

Gout. Who is the sure physician that can cure this malady? Death is yet the only cure.

Falstaff. A man can no more separate age and covetousness, than he can part young limbs and leechery: but the gout galls the one, and the pox pinches the other.

—*Part Second, King Henry Fourth, Act I., Sc. 2.*

Falstaff. I can get no remedy against this consumption of the purse: borrowing only lingers and lingers it out, but the disease is incurable. * * * A pox of this gout! or, a gout of this pox! for the one, or the other plays the rogue with my great toe. It is no matter if I do halt; I have the wars for my color, and my pension shall seem the more reasonable. A good wit will make use of anything; I will turn diseases to commodity.

—*Part Second, King Henry Fourth, Act I., Sc. 2.*

Malcolm. Comes the King forth, I pray you?

Doctor. Ay, Sir: there are a crew of wretched souls
That stay his cure: their malady convinces
The great assay of art; but, at his touch,
Such sanctity hath heaven given his hand,
They presently amend.

Macduff. What's the disease he means?

Malcolm. 'Tis call'd the evil:
A most miraculous work in this good king:
Which often, since my here-remain in England,
I have seen him do. How he solicits heaven,
Himself best knows: but strangely-visited people,
All swoln and ulcerous, pitiful to the eye,
The mere despair of surgery, he cures;
Hanging a golden stamp about their necks,
Put on with holy prayers: and 'tis spoken,

To the succeeding royalty he leaves
The healing benediction. With this strange virtue,
He hath a heavenly gift of prophecy.
—*Macbeth, Act IV., Sc. 3.*

Scrofula was until the seventeenth century known as the King's evil, and was confidently believed to be cured by the King's touch.

Capulet. Out, you green-sickness Carrion! out, you baggage! you tallow-face.
—*Romeo and Juliet, Act III., Sc. 5.*

Enobarbus. ———; and Lepidus,
Since Pompey's feast, as Menas says, is troubled
With the green sickness.
—*Antony and Cleopatra, Act III., Sc. 2.*

Here is a rare case, chlorosis in a man.

Viola. ———: She never told her love,
But let concealment, like a worm i' the bud,
Feed on her damask cheek: she pin'd in thought;
And with a green and yellow melancholy,
She sat like patience on a monument
Smiling at grief. Was not this love indeed?
—*Twelfth Night, Act II., Sc. 4.*

I hardly think that there will be found a general practicer of medicine who will not connect this melancholy of Viola's with digestive trouble, anemia, chlorosis and a train of functional disturbances as much as with disappointed love.

Bardolph. 'Sblood. I would my face were in your belly!

Falstaff. God-a-mercy! so should I be sure to be heart-burned.
—*Part First, King Henry Fourth, Act III., Sc. 3.*

Indigestion accompanied by heart-burn.

Beatrice. How tartly that gentleman looks! I never can see him but I am heart-burned an hour after.

—Much Ado About Nothing, Act II., Sc. 1.

Hyperacidity of the gastric secretions inducing heart-burn.

Agamemnon. What grief hath set the jaundice on your cheeks?

—Troilus and Cressida, Act I., Sc. 3.

This reference clearly sets forth the connection between melancholy minds and affections of the liver.

Paulina. I say, she's dead: I'll swear 't, if word, nor oath
Prevail not, go and see: if you can bring
Tincture, or lustre, in her lip, her eye,
Heat outwardly, or breath within,—

—Winter's Tale, Act III., Sc. 2.

It is quite evident that the queen was in a cataleptic state resulting from hysteria following much physical and mental suffering.

First Servant. Peace is a very apoplexy, lethargy; mulled, deaf, sleepy, insensible; a getter of more bastard children than war's a destroyer of men.

—Coriolanus, Act IV., Sc. 5.

Apoplexy with the accompanying objective signs or symptoms.

Falstaff. I heard say, your lordship was sick. I hope your lordship goes abroad by advice. And I hear, moreover, his highness is fallen into this same whoreson apoplexy. This apoplexy is, as I take it, a kind of lethargy,—a sleeping of the blood, a whoreson tingling. It hath its original from much grief; from study, and perturbation of the brain; I have read the cause of its effects in Galen; it is a kind of deafness. * * *

I am as poor as Job, my lord, but not so patient: your lordship may minister the potion of imprisonment to me in respect to poverty; but how I should be your patient to follow your prescriptions, the wise may make some dram of a scruple, or, indeed, a scruple itself. * * *

—Part Second, King Henry Fourth, Act I., Sc. 2.

Hamlet. But, sure, that sense
Is apoplexed.

—Hamlet, Act III., Sc. 4.

Prospero. Go, charge my goblins, that they grind their joints
With dry convulsions; shorten up their sinews
With aged cramps; and more pinch-spotted make them
Than pard or cat o'mountain.

—*Tempest, Act IV., Sc. 1.*

Pard-a leopard.

Prospero. For this, be sure, to-night thou shalt have cramps,
Side-stitches that shall pen thy breath up; urchins
Shall, for that vast of night that they may work,
All exercise on thee: thou shalt be pinch'd
As thick as honey-comb, each pinch more stinging
Than bees that made them.

—*Tempest, Act I., Sc. 2.*

Cramps or spasms of the voluntary muscles.

Prospero. If thou neglect'st or dost unwillingly
What I command, I'll rack thee with old cramps;
Fill all thy bones with aches; make thee roar,
That beasts shall tremble at thy din.

—*Tempest, Act I., Sc. 2.*

Cramps and bone-aches.

Lafeu. To be relinquish'd of all the learned authentic fellows!

Parolles. So I say; both of Galen and Paracelsus!

King. Sit, my preserver, by thy patient's side.
* * * * * * * * * * *
Where great additions swell, and virtue none,
It is a dropsied honour.

—*All's Well That Ends Well, Act II., Sc. 3.*

Caliban. The dropsy drown this fool!

—*Tempest, Act IV., Sc. 1.*

Is it not a fact that one suffering from a dropsy may be drowned in the fluid as well as that one may bleed to death in his own veins?

Caius Marcius. What's the matter, you dissentious rogues,
That, rubbing the poor itch of your opinion,
Make yourselves scabs?

—*Coriolanus, Act I., Sc. 1.*

Benvolio. Take thou some new infection to the eye,
And the rank poison of the old will die.

—*Romeo and Juliet, Act I., Sc. 2.*

Here is unquestionably an allusion to the antitoxic effect of one septic substance when brought into contact with another.

The possibilities in this direction were known centuries before Shakspere's time, for we find that the search for some means to not only bring about immunity, but the application of one poison to counteract another, dates back to Galen. He relates that he used the flesh of the viper as an antivenom, while Mithridates sought to fortify himself against disease by taking the then known antidotes, as well as experimenting upon condemned criminals, finally rendering, we are told, both himself and them immune to snake bite by taking the blood of animals which had been fed upon venomous snakes: Andromachus, physician to Nero, as well as other notables, resorted to these same expedients. Finally Dioscorides advised those bitten by mad dogs to drink the blood and eat of the liver of the animals which had bitten them.

Lear. O, how this mother swells up toward my heart!
Hysterica-passio! down, thou climbing sorrow,
Thy element's below!

—*King Lear, Act II., Sc. 4.*

Mother or Moother was in ages past the popular name for hysteria.

Doctor. You see, her eyes are open.

Gentlewoman. Ay, but their sense is shut.—

Doctor. What a sign is there! the heart is sorely charged.—
This disease is beyond my practice:—
More needs she the divine than the physician.
—*Macbeth, Act V., Sc. 1.*

A case of somnambulism, resulting, in Lady Macbeth's case, from a sorely troubled mind following the murder of the king by her lord and with her help. There remained the smell of blood which "All the perfumes of Arabia could not sweeten."

Paulina. I come to bring him sleep. 'Tis such as you,—
That creep like shadows by him, and do sigh
At each his needless heavings,—such as you
Nourish the cause of his awaking.
—*Winter's Tale, Act II., Sc. 3.*

Plainly exhibited sympathy and officious attention to the sick often disturb them more than necessary duties performed in a direct and unhesitating manner.

King Henry. How many thousands of my poorest subjects
Are at this hour asleep, sleep, gentle sleep,
Nature's soft nurse, how have I frighted thee,
That thou no more wilt weigh my eye-lids down
And steep my senses in forgetfulness?
Why, rather, sleep, liest thou in smoky cribs,
Upon uneasy pallets stretching thee,
And hush'd with buzzing night-flies to thy slumber,
Than in the perfumed chambers of the great,
Under the canopies of costly state,
And lulled with sounds of sweetest melody?
O thou dull god, why liest thou with the vile
In loathsome beds; and leav'st the kingly couch?

* * * * * * * * *

Wilt thou upon the high and giddy mast
Seal up the ship-boy's eyes and rock his brains
In cradle of the rude imperious surge?

* * * * * * * * *

Canst thou, O partial sleep! give thy repose
To the wet sea-boy in an hour so rude;
And in the calmest and most stillest night,
With all appliances and means to boot,

Deny it to a king! Then, happy low, lie down!
Uneasy lies the head that wears a crown.
—*Part Second, King Henry Fourth, Act III., Sc. 1.*

Here is a pronounced case of insomnia.

Desdemona. For let our finger ache, and it indues
Our other healthful members ev'n to a sense
Of pain:
—*Othello, Act III., Sc. 4.*

This passage refers to sympathetic disturbances and to the influence of mind on the body.

King Henry. Then you perceive the body of our kingdom,
How foul it is; what rank diseases grow,
And with what danger, near the heart of it.

Warwick. It is but as a body yet distempered,
Which to his former strength may be restored
With good advice and little medicine.
—*Part Second, King Henry Fourth, Act III., Sc. 1.*

Here the Master shows that functional disturbances are often remedied "with good advice and little medicine."

Archbishop of York. ——: We are all diseas'd;
And, with our surfeiting and wanton hours,
Have brought ourselves into a burning fever,
And we must bleed for it: of which disease,
Our late King, Richard, being infected, died.
But my most noble lord of Westmoreland
I take not on me here as a physician;
Nor do I, as an enemy to peace,
Troop in the throngs of military men:
But rather show awhile like fearful war,
To diet rank minds, sick of happiness;
And purge the obstructions, which begin to stop
Our very veins of life.
—*Part Second, King Henry Fourth, Act IV., Sc. 1.*

We have here an arraignment of the social pleasures which are so surely followed by a train of disturbances such as gout,

functional disorders, indigestion, neuralgias, anemias, etc. Happily, however, we are not now, as in the days of Shakspere, compelled to "bleed for it," but we suffer nevertheless as surely as did those of whom the Archbishop told.

Constance. For I am sick, and capable of fears.
—*King John, Act III., Sc. 1.*

Prince Henry. If he be sick
With joy, he will recover without physic.
—*Part Second, King Henry Fourth, Act IV., Sc. 4.*

Horatio. ——— think of it:
(The very place puts toys of desperation,
Without more motive, into every brain,
That looks so many fathoms to the sea,
And hears it roar beneath.)
—*Hamlet, Act I., Sc. 4.*

We are to understand the quotation to refer to the temptation to cast one's self from a height when contemplating the depths below.

Edgar. Come on, sir; here's the place!—Stand still.—How fearful
And dizzy 'tis, to cast one's eyes so low!
—*King Lear, Act IV., Sc. 6.*

Here we have clearly set forth the influence of the emotions over the body as well as the will or mind. Who has not suffered fear when looking from a great height.

Bassanio. Madam, you have bereft me of all words,
Only my blood speaks to you in my veins:
—*Merchant of Venice, Act III., Sc. 2.*

This quotation shows the effect of emotional excitement on the circulation.

Gloster. Pardon me, gracious lord;
Some sudden qualm hath struck me at the heart,
And dimmed mine eyes; that I can read no further.
—*Part Second, King Henry Sixth, Act I., Sc. 1.*

This passage sets forth in unmistakable force the effect of a sudden emotion on the vision.

Isabella. Darest thou die?
The sense of death is most in apprehension;
And the poor beetle, that we tread upon,
In corporal sufferance finds a pang as great
As when a giant dies.
—*Measure for Measure, Act III., Sc. 1.*

Falstaff. It is certain that either wise bearing or ignorant carriage, is caught as men take diseases, one of another: therefore, let men take heed of their company.
—*Part Second, King Henry Fourth, Act V., Sc. 1.*

Helena. Sickness is catching; O, were favor so,
Yours would I catch, fair Hermia, ere I go;
—*Midsummer Night's Dream, Act I., Sc. 1.*

Infection is here acknowledged.

Sands. 'Tis time to give them physic, their diseases
Are grown so catching.
—*King Henry Eighth, Act I., Sc. 3.*

Queen Margaret. I am no loathsome leper, look on me.
—*Part Second, King Henry Sixth, Act III., Sc. 2.*

Touchstone. If any man doubt that, let him put me to my purgation.
—*As You Like It, Act V., Sc. 4.*

The purgation referred to by Touchstone is evidently in a legal sense. To purge one's self by oath was, and is yet, practiced in courts of law. The church purges itself of unworthy members by expelling them.

Macbeth. What rhubarb, senna, or what purgative drug
Would scour these English hence?
—*Macbeth, Act V., Sc. 3.*

King Richard. Let's purge this choler without letting blood;
This we prescribe, though no physician;
Deep malice makes too deep incision.
—*King Richard Second, Act I., Sc. 1.*

Iago. Yet again your fingers to your lips? Would they were clyster-pipes for your sake.
—*Othello, Act II., Sc. 1.*

Clyster-pipes or enema containers. Enemas in Shakspere's time consisted mainly of solutions or mixtures of aloes, asafetida, epsom salt, opium, tobacco or turpentine.

Claudio. The miserable have no other medicine,
But only hope:
—*Measure for Measure, Act III., Sc. 1.*

Hope, what would we do or be without hope? Hope that buoys us up even to the last. There is no sorrow, no pain, even in the most depressed, those suffering with incurable disease, from the most horrible of accidents but are blessed with hope. It belongs to the pauper as well as the prince; to the diseased as well as those in perfect health; to those on beds of pain and suffering as well as to those joyously bent upon pleasure; to the forlorn and friendless outcast as well as to him who receives the plaudits alike of friend and sycophant. Blessed is hope, for it is ours without price or the asking. More blessed to the miserable, for truly such have no other medicine, but only hope.

Apemantus. So, so; there!—
Aches contract and starve your supple joints!—
—*Timon of Athens, Act I., Sc. 1.*

Macbeth. The labour we delight in physics pain.
—*Macbeth, Act II., Sc. 3.*

The benefits of occupation are many, especially for imaginary ills.

Bull-calf. (A Recruit) O, sir! I am a diseased man.

Falstaff. What disease hast thou?

Bull-calf. A whoreson cold, sir; a cough, sir; which I caught with ringing in the king's affairs upon his coronation day, sir.

Falstaff. Come, thou shalt go to the wars in a gown; we will have away thy cold.

—*Part Second, King Henry Fourth, Act III., Sc. 2.*

Falstaff. Sirrah, you giant, what said the doctor to my water?

Page. He said, sir, the water itself was a good healthy water; but for the party that owned it he might have more diseases than he knew for.

—*Part Second, King Henry Fourth, Act I., Sc. 2.*

The value of urinary analysis was known centuries before Shakspere's time. There is frequent reference to examinations of the urine in Shakspere's plays; in this instance, however, we infer that the Master wished to cast a slur upon professional opinions.

Hamlet. Slanders, sir: for the satirical slave says here, that old men have gray beards; that their faces are wrinkled; their eyes purging thick amber, or plum tree-gum; and that they have a plentiful lack of wit, together with weak hams:

—*Hamlet, Act II., Sc. 2.*

Here we have a case of senile decay.

Mortimer. Kind keepers of my weak decaying age,
Let dying Mortimer here rest himself.
Even like a man new haled from the rack,
So fare my limbs with long imprisonment:
And these gray locks, these pursuivants of death,
Nestor-like aged, in an age of care,
Argue the end of Edmund Mortimer.
These eyes, like oil whose wasting oil is spent,
Wax dim, as drawing to their exigent:
Weak shoulders, over-borne with burd'ning grief:
And pithless arms, like to a wither'd vine
That droops his sapless branches to the ground.
Yet are these feet, whose strengthless stay is numb,
Unable to support this lump of clay,
Swift-winged with desire to get a grave,
As witting I no other comfort have.

—*Part First, King Henry Sixth, Act II., Sc. 5.*

Senile decay with approaching death.

Chief Justice. Do you set down your name in the scroll of youth, that are written down old with all the characters of age? Have you not a moist eye? a dry hand? a yellow cheek? a white beard? a decreasing leg? an increasing belly? Is not your voice broken? your wind short? your chin double? your wit single? and every part about you blasted with antiquity? and will you yet call yourself young?

—*Part Second, King Henry Fourth, Act I., Sc. 2.*

Gonzalo. Like poison given to work a great time after,
Now 'gins to bite the spirits.

—*Tempest, Act III., Sc. 3.*

There was a belief that poison could be given without those taking it being aware of it, and that it would act only at some remote period. See references to secret poisonings by the author in *New York Medical Record,* August, 1903.

Prince Henry. It is too late; the life of all his blood
Is touch'd corruptibly; and his pure brain
(Which some suppose the soul's frail dwelling-house)
Doth, by the idle comments that it makes,
Foretell the ending of mortality.—

Pembroke. He is more patient
Than when you left him; even now he sung.

Prince Henry. O vanity of sickness! fierce extremes,
In their continuance, will not feel themselves.
Death, having preyed upon the outward parts,
Leaves them insensible; and his siege is now
Against the mind, the which he pricks and wounds
With many legions of strange fantasies;
Which, in their throng and press to this last hold,
Confound themselves.

King John. (Brought in) Poisoned,—ill fare;—dead, forsook, cast off;
And none of you will bid the winter come,
To thrust his icy fingers in my maw;
Nor let my kingdom's rivers take their course
Through my burn'd bosom; nor entreat the north

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To make his bleak winds kiss my parched lips,
And comfort me with cold.

—*King John, Act V., Sc. 7.*

Here is a perfect description of arsenical poisoning.

Northumberland. In poison there is physic; and these news,
Having been well, that would have made me sick,
Being sick, have in some measure made me well;
And as the wretch, whose fever weaken'd joints,
Like strengthless hinges, buckle under fire,
Impatient of his fit, breaks like a fire
Out of his keeper's arms; even so my limbs,
Weaken'd with grief, being now enrag'd with grief,
Are thrice themselves; hence, therefore thou nice crutch;

—*Part Second, King Henry Fourth, Act I., Sc. 1*

Cæsar. The manner of their deaths?
I do not see them bleed.
If they had swallowed poison 'twould appear
By external swellings; but she looks like sleep.

Dolabella. Here on her breast
There is a vent of blood, and something blown:
The like is on her arm.

Guard. This is an aspic's trail.

Cæsar. Most probably
That so she died; for her physician tells me
She hath pursu'd conclusions infinite
Of easy ways to die.—

—*Antony and Cleopatra, Act V., Sc. 2.*

Coriolanus. To jump a body with a dangerous physic,
That's sure of death without it,—

Brutus. Sir, those cold ways,
That seem like prudent helps, are very poisonous
When the disease is violent:—

—*Coriolanus, Act III., Sc. 1.*

What a lecture is here given to the physician, too ready to dose his patient in the hope of giving relief, when a diagnosis cannot be made.

Patience. Do you note,
How much her grace is alter'd on the sudden?
How long her face is drawn? How pale she looks,
And of an earthly cold? Mark you her eyes!

Griffith. She is going, wench; pray, pray.

Patience. Heaven comfort her!

—*King Henry Eighth, Act IV., Sc. 2.*

Here is a most excellent description of near approaching death.

Capulet. ————, alas! she's cold;
Her blood is settled; and her joints are stiff;
Life and those lips have long been separated.

—*Romeo and Juliet, Act IV., Sc. 5.*

Rigor mortis following death.

Host. What says my Esculapius? my Galen? my heart of elder? ha! is he dead, bully Stale? is he dead?

* * * * * * * * * * * * * *

Thou art a Castilian, King Urinal!

Shallow. ———: he is a curer of souls and you a curer of bodies; if you should fight, you go against the hair of your professions, * * *

Host. ———ah, monsieur Mock-water.

Caius. ———: by gar, I love you; and I shall procure-a you de good guest, de earl, de knight, de lords, de gentlemen, my patients.

—*Merry Wives of Windsor, Act II., Sc. 3.*

Heart of elder being soft pith, the reference to it is not complimentary to Caius. Then the Host calls him a Castilian, an opprobrious designation for the Spaniard, whom the English

in Shakspere's time hated. Mock-water means counterfeit valor, and refers to "Doctor Caius," a professional counterfeit.

It will be seen that the ignorant quack is here well pictured in "Doctor Caius." The profession has always suffered from this incubus. The greater the ignorance, the more pompous, vain and boastful. It would seem that the success of these parasites was measured by the extent or degree of their ignorance. In this country, however, we see the effect of state legislation for the purpose of regulating the practice of medicine. These laws are, in most of the states, wisely framed and have accomplished much good in protecting the people. In time, we shall hope to have this dangerous parasite pass from among us.

The Host is more than a match for "Doctor Caius," for he evidently appreciates him at his true worth.

Evans. ———Master Caius, that calls himself *Doctor of Physic?*
—Merry Wives of Windsor, Act III., Sc. 1.

Host. Peace, I say: soul-curer and body-curer,—shall I lose my doctor? no, he gives me the potions and the motions. Shall I lose my parson, my priest, my Sir Hugh? no, he gives me the proverbs and the no-verbs.
—Merry Wives of Windsor, Act III., Sc. 2.

SURGERY

Sir Toby. ———; he's hurt me, and there's an end on't.—Sot, did'st see Dick Surgeon, sot?

Clown. O he's drunk, Sir Toby, an hour agone; his eyes were set at eight i' the morning.

Sir Toby. ———; I hate a drunken rogue.
—Twelfth Night, Act V., Sc. 1.

Sir Toby very wisely objects to a drunken surgeon.

Hotspur. I then, all smarting, with my wounds being cold,
To be so pester'd with a popinjay,
Out of my grief and my impatience
Answer'd neglectingly, I know not what;
* * * * * * * * * * * * * *
And telling me, the sovereign'st thing on earth
Was parmaceti, for an inward bruise.
—*First Part, King Henry the Fourth, Act I., Sc. 3.*

Cold, as here applied to wounds, refers to the belief that "when the blood is cold we feel the wounds." Popinjay signifies parrot or parrot-like. "Out of my grief" is to be interpreted out of my pain. Parmaceti is intended for spermaceti. The housewife in olden times regarded spermaceti as "excellent for inward bruises."

The quotation shows that Hotspur was impatient and disgusted with this adviser "perfumed as a milliner" who objected to having the soldiers bear dead bodies from the battle field "betwixt the wind and his nobility." The passage should be read in full.

Messenger. Send succors, lords, and stop the rage betime,
Before the wound do grow incurable;
For being green there is great hope of help.
—*Part Second, King Henry the Sixth, Act III., Sc. 1.*

"Being green" or freshly made. Wounds left to become infected do not heal by first intention.

Queen Margaret. Away! though parting be a fretful corsive,
It is applied to a deathful wound.
—*Part Second, King Henry the Sixth, Act III., Sc. 2.*

Corsive, corrosive.

Caius Marcius. I have some wounds upon me, and they smart
To hear themselves remember'd.

Cominius. Should they not,
Well might they fester 'gainst ingratitude,
And tent their senses with death.
—*Coriolanus, Act I., Sc. 9.*

Menenius. Where is he wounded?

Volumnia. I' the shoulder, and i' the left arm. There will be large cicatrices to show the people, when he shall stand for his place. He received in the repulse of Tarquin seven hurts i' the body.

—*Coriolanus, Act II., Sc. 1.*

Iago. What wound did ever heal but by degrees?

—*Othello, Act II., Sc. 3.*

Anna. O, gentlemen, see, see! dead Henry's wounds
Open their congeal'd mouths and bleed afresh!
Blush, blush, thou lump of foul deformity;
For 'tis thy presence that exhales this blood
From cold and empty veins, where no blood dwells;
Thy deed, inhuman and unnatural,
Provokes this deluge most unnatural.

—*King Richard Third, Act I., Sc. 2.*

There was a belief in earlier times that the wounds of a person murdered opened and bled in the presence of the murderer. Thus they cried to heaven for revenge.

Archbishop. Our peace will, like a broken limb united,
Grow stronger for the breaking.

—*Part Second, King Henry the Fourth, Act IV., Sc. 1.*

Buckingham. But lately, splinter'd, knit, and join'd together,
Must gently be preserv'd, cherish'd and kept;
* * * ————————, lest
The new heal'd wound of malice should break out;
Which would be so much the more dangerous,
By how much the estate is green, and yet ungoverned.

—*King Richard the Third, Act II., Sc. 2.*

Iago. This broken joint between you and her husband, entreat her to splinter;—this crack of your love shall grow stronger than it was before.

—*Othello, Act II., Sc. 3.*

Sicinius. He's a disease that must be cut away.

Menenius. O, he's a limb, that has but a disease;
Mortal to cut it off; to cure it, easy.

* * * * * * * * *

The service of the foot
Being once gangren'd, is not then respected
For what before it was.

—*Coriolanus, Act III., Sc. 1.*

York. This fester'd joint cut off, the rest rests sound;
This, let alone, will all the rest confound.

—*King Richard the Second, Act V., Sc. 3.*

This quotation refers to Aumerle, York's son and cousin to Bolingbroke, afterwards King Henry the IV., who has entered into the conspiracy to overthrow Bolingbroke. York wishes his son summarily dealt with rather than allow him to return to his fellow-conspirators to thus "All the rest confound."

Hamlet. ————Mother, for love of grace,
Lay not that flattering unction to your soul,
That not your trespass, but my madness speaks;
It will but skin and film the ulcerous place,
Whiles rank corruption, mining all within,
Infects unseen.

—*Hamlet, Act III., Sc. 4.*

The Master here shows the necessity of repair in wounds or abscesses from the bottom and the need of drainage for the accumulated pus. "Mining all within, infects unseen" applies to-day as in his time. It is fair to presume that with the drainage tubes and antiseptic gauze of to-day much more comfort would have been secured the patient and many lives prolonged. And yet, is it not strange that these great principles in surgery should have been so clearly defined at such a time and that, too, by a layman? It cannot be said that the practice of medicine was based upon such rational and scientific inferences in Shakspere's time as was surgery, for here is a principle in surgery clearly stated at a time when therapeutics consisted in the administration of all sorts of empirical or irrational compounds, calculated, it would seem at this day, to do infinite injury to the poor sufferer, rather than to aid his recovery. What with purging, blood-letting,

etc., it must be that the mortality was great in the time of Shakspere.

King. But like the owner of a foul disease,
To keep it from divulging, let it feed
Even on the pith of life.

—*Hamlet, Act IV., Sc. 1.*

King Richard. More than it is, ere foul sin, gathering head,
Shall break into corruption:

—*King Richard the Second, Act V., Sc. 1.*

Hamlet. This is the imposthume of much wealth and peace;
That inward breaks, and shows no cause without,
Why the man dies.

—*Hamlet, Act IV., Sc. 4.*

King. Since yet thy cicatrice looks raw and red.

* * * * * * * *

For, like the hectic in my blood he rages,
And thou must cure me.

—*Hamlet, Act IV., Sc. 3.*

Bottom. I shall desire of you more acquaintance, good Master Cobweb: If I cut my finger, I shall make bold with you.—

—*Midsummer Night's Dream, Act III., Sc. 1.*

Cobweb or spider web has always been a popular domestic remedy with which to control hemorrhages.

Second Servant. Go thou; I'll fetch some flax and whites of eggs
To apply to his bleeding face. Now heaven help him!

—*King Lear, Act III., Sc. 7.*

A method of stopping hemorrhage.

Salisbury. I am not glad that such a sore of time
Should seek a plaster by contemn'd revolt,

And heal the inveterate canker of one wound,
By making many.

—*King John, Act V., Sc. 2.*

This refers to a seaton or issue; or possibly to a blistering plaster applied for the purpose of producing counterirritation.

Cæsar. ———; But we do lance
Diseases in our bodies.

—*Antony and Cleopatra, Act V., Sc. 1.*

Lear. The untented woundings of a father's curse
Pierce every sense about thee!

—*King Lear, Act I., Sc. 4.*

"Untented woundings" or those that cannot be probed; incurable.

Hector. ———; but modest doubt is call'd
The beacon of the wise, the tent that searches
To the bottom of the worst.

—*Troilus and Cressida, Act II., Sc. 2.*

Patroclus. Who keeps the tent now?
The surgeon's box, or the patient's wound.

—*Troilus and Cressida, Act V., Sc. 1.*

Tent here refers to small pledgets of some soft material, usually lint, often medicated, which were inserted into wounds as the modern surgeon uses gauze.

Menenius. For 'tis a sore upon us
You cannot tent yourself;

—*Coriolanus, Act III., Sc. 1.*

Imogene. Talk thy tongue weary; speak:
I have heard I am a strumpet; and mine ear,
Therein false struck, can take no greater wound,
Nor tent to bottom that.

—*Cymbeline, Act III., Sc. 4.*

Tent or probe to the bottom.

workings of the mind in disease will be seen from a reading of the following quotations:

Olivia. Why, this is very midsummer madness.

—*Twelfth Night, Act III., Sc. 4.*

The belief that the loss of one's wits was in a great measure due to the influence of the moon prevailed in Shakspere's time, and the coming of the midsummer moon was regarded as a critical time in the lives of those not mentally strong. We find this mentioned in Ray's Proverbs as well as in Palsgrove in 1590 and in Poor Richard's Almanack.

Malvolio. I am no more mad than you are, make the trial of it in any constant question.

Clown. Nay, I'll ne'er believe a madman 'till I see his brains. I will fetch you light, and paper and ink.

—*Twelfth Night, Act IV., Sc. 2.*

The Clown will not accept the protestations of Malvolio that he is not mad; he proposes to put him to the test in having him write, "'till I see his brains" in his writing or sentences.

Sebastian. ———: but that I am not mad,
Or else the lady's mad; yet, if 'twere so,
She could not sway her house, command her followers
Take and give back affairs, and their despatch,
With such a smooth, discreet and stable bearing,
As, I perceive, she does: there's something in't,
That is deceivable.

—*Twelfth Night, Act IV., Sc. 3.*

Duke. If she be mad as I believe no other,
Her madness hath the oddest frame of sense,
(Such dependency of thing on thing),
As e'er I heard in madness.

—*Measure for Measure, Act V., Sc. 1.*

Page. For your physicians have expressly charg'd
In peril to incur your former malady,
That I should yet absent me from your bed:

* * * * * * * * * * * * * *

Sly. ———. But I would be loath to fall into my dreams again; I will therefore tarry, in despite of the flesh and the blood.

—*Taming of the Shrew, Introduction, Sc. 2.*

Abbess. And therefore came it that the man was mad:
The venom clamours of a jealous woman
Poison more deadly than a mad dog's tooth.
It seems, his sleeps were hinder'd by thy railing;
And thereof comes it, that his head is light.
Thou say'st, his meat was sauc'd by thy upraidings:
Unquiet meals make ill digestions,
Thereof the raging fire of fever bred;
And what's a fever but a fit of madness?
Thou say'st his sports were hinder'd by thy brawls:
Sweet recreation barr'd, what doth ensue,
But moody and dull melancholy,
Kinsman to grief and comfortless despair,
And, at her heels, a huge infectious troop
Of pale distemperatures, and foes to life?
In food, in sport, and life-preserving rest
To be disturb'd, would mad or man, or beast:
The consequence is then, thy jealous fits
Have scar'd thy husband from the use of wits.

—*Comedy of Errors, Act V., Sc. 1.*

How many men and women are confined in State Hospitals for the insane as the result of domestic brawls, upbraidings, criminations and recriminations. The Master here points a painful truth which it is the misfortune of most physicians to see more or less frequently.

Note the reference to hydrophobia, melancholia, insomnia, dyspepsia and the want of recreation.

Macbeth. How does your patient, doctor?
Doctor. Not so sick, my lord,
As she is troubled with thick coming fancies
That keep her from her rest.

syphilis when, as in those days, improperly treated. Laryngeal complication, destruction of the tissues of the nose, loss of hair and often the production of impotency.

Thersites. After this, vengeance on the whole camp! or, rather, the bone-ache! for that methinks is the curse dependent on those that war for a placket.

—*Troilus and Cressida, Act II., Sc. 3.*

This passage refers to syphilis. Placket to the opening in the upper part of petticoats worn by women. The connection will be readily understood.

Pandarus. A whoreson tisick, a whoreson rascally tisick so troubles me, and the foolish fortune of this girl; and what one thing, what another, that I shall leave you one o' these days: And I have a rheum in mine eyes too; and such an ache in my bones, that, unless a man were cursed, I cannot tell what to think on't.—

—*Troilus and Cressida, Act V., Sc. 4.*

I am more inclined to regard this a case of tertiary syphilis than one of pulmonary tuberculosis or consumption. The condition of the eyes and the ache in the bones point to the former disease rather than to the latter.

Clown. Why, masters, have your instruments been at Naples, that they speak i' the nose thus?

—*Othello, Act III., Sc. 1.*

It is said that in Naples the effect of syphilis were more audible and visible than elsewhere.

Boult. ——— But, mistress do you know the French knight?
Bawd. Well, well; as for him, he brought his disease hither.

—*Pericles, Act IV., Sc. 3.*

Lysimachus. ———How now, unwholesome iniquity?
Have you that a man may deal withal, and defy the surgeon?

—*Pericles, Act IV., Sc. 6.*

This question is put to the keeper of a brothel and refers to the probability of contracting venereal diseases while an inmate.

Dromio of Syracuse. Master, is this Mistress Satan?

Antipholus of Syracuse. It is the devil.

Dromio of Syracuse. Nay, she is worse, she is the devil's dam; and here she comes in the habit of a light wench; and thereof comes, that the wenches say, "God damn me"; that's as much as to say; "God make me a light wench." It is written, they appear to men like angels of light: light is an effect of fire, and fire will burn; *ergo,* light wenches will burn. Come not near her.

—*Comedy of Errors, Act IV., Sc. 3.*

The "burning devil" was none else than the pain of acute gonorrhea.

Prince Henry. For the women.—

Falstaff. For one of them,— she is in hell already, and burns, poor soul! For the other,— I owe her money: and whether she be damned for that, I know not.

Host. No, I warrant you.

—*Part Second, King Henry Fourth, Act II., Sc. 4.*

"Doll" according to that reprobate Falstaff is already in hell, because she burns: has gonorrhea in the acute form. "For the other" he himself owes her money and not being above suspicion does not know whether he has infected her or not. The Host who is pretty well acquainted with Sir John, has no doubt regarding it, hence his "No, I warrant you;" accent on warrant.

MENTAL AND NERVOUS DISEASES.

In deciding upon the selections for this chapter I have taken only such as will appeal with greater interest to the general practicers of medicine. Very instructive and highly edifying essays could be written upon the characters of Ophelia, Lear, Constance, Timon, Caliban, Lady Macbeth and others, but such essays would be out of place in a chapter which is intended only to quote illustrations referring to mental diseases. That various phases of insanity were known to Shakspere and that he had more than a cursory knowledge of the

Pistol. No; to the spital go,
And from the powdering-tub of infamy
Fetch forth the lazar kite of Cressid's kind,
Doll Tear-sheet she by name, and her espouse.
—*King Henry Fifth, Act II., Sc. 1.*

King Henry. Indeed, the French may lay twenty French crowns to one, they will beat us; for they bear them on their shoulders: but it is no English treason to cut French crowns, and tomorrow the king himself will be a clipper.
—*King Henry Fifth, Act IV., Sc. 1.*

Pistol. News have I
That my Nell is dead i' the spital of malady of France.
—*King Henry Fifth, Act V., Sc. 1.*

"Malady of France" as elsewhere stated we know to have been syphilis. "Spital" or hospital was where these cases were often sent for treatment.

First Clown. 'Faith, if he be not rotten before he die, (as we have many pocky cases now-a-days, that will scarce hold the laying in,) he will last you some eight year, or nine year; a tanner will last you nine year.
—*Hamlet, Act V., Sc. 1.*

Here is another allusion to syphilis. The frequency of these references would indicate a widespread prevalence of the disease in Shakspere's time, more especially in France.

The reader will remember the acrimonious disputes between the physician and surgeon as to which should treat this disease. Its prevalence among the people more particularly in France where the dispute was waged with great energy, made its treatment a very lucrative part of medical practice and neither was willing to surrender to the other without a struggle. The French disease, (Morbus Gallicus) as it was known, soon became prevalent throughout Europe. Some, however, distinguished it as the Neapolitan disease from the fact that it was so common in Naples.

Timon. This yellow slave
Will knit and break religions; bless the accursed;
Make the hoar leprosy adored; place thieves,

And give them title, knee, and approbation,
With senators on the bench: this is it,
That makes the wappen'd widow wed again;
She, whom the spital-house and ulcerous sores
Would cast the gorge at, this embalms and spices
To the April day again.

—*Timon of Athens, Act IV., Sc. 3.*

The master here refers to the value of gold and the diseased syphilitic ready to wed again for the power its possession brings. Wappen'd means one so diseased.

Falstaff. If the cook help to make the gluttony, you help to make the diseases, Doll: we catch of you, Doll, we catch of you.

Doll. Ay, marry; our chains and our jewels.

Falstaff. Your brooches, pearls and owches.

—*Part Second, King Henry Fourth, Act II., Sc. 4.*

Brooches, pearls and owches, certainly do not here refer to jewels or ornaments.

Timon. (To his mistresses, Phrynia and Timandra).
————; Yet may your pains, six months,
Be quite contrary;————
* * * * * * * * * * *
Consumptions sow
In hollow bones of man; strike their sharp shins,
And mar men's spurring. Crack the lawyer's voice,
That he may never more false titles plead,
Nor sound his quillet shrilly; hoar the flamen
————: down with the nose,
Down with it flat; take the bridge quite away.
————: make curl'd pate ruffians bald;
And let the unscarred braggarts of the war
Derive some pain from you: Plague all;
That your activity may defeat, and quell
The source of all erection.

—*Timon of Athens, Act IV., Sc. 3.*

Timon refers to the pains that sexual disease produces in the other sex, contracted of the harlot, and of her own loss in that she is meanwhile prevented from practicing her vocation or in doing so of the discomfort it causes her.

The Master calls attention to the whole train of sequels following

Bertram. What is it, my good lord, the king languishes of?
Lafeu. A fistula, my lord.

—*All's Well That Ends Well, Act I., Sc. 1.*

This fistula was not the familiar fistula in ano, but a fistula in the chest resulting from empyema. The cure was effected in two days. (?)

Thersites. Now the rotten diseases of the south, the guts griping, ruptures, catarrhs, loads of gravel i' the back, lethargies, cold palsies, raw eyes, dirt-rotten livers, wheezing lungs, bladders full of imposthume, sciaticas, limekilns i' the palm, incurable bone-ache, and the rivelled fee-simple of the tetter, take and take again such preposterous discoveries.

—*Troilus and Cressida, Act V., Sc. 1.*

Thersites certainly was master of invective. With such an array of complaints it were useless to contend. It is especially interesting to note here reference to cystitis and renal calculus.

Antigonus. I have three daughters; the eldest is eleven,
The second, and the third, nine; and some five;
If this prove true, they'll pay for't: by mine honour,
I'll geld them all: fourteen they shall not see,
To bring false generations: they are co-heirs;
And I had rather glib myself than they
Should not produce fair issue.

—*Winter's Tale, Act II., Sc. 1.*

The Master here places the age at which menstruation or puberty appears at fourteen years.

To geld his daughters Antigonus would have to remove their ovaries. Can it be that this operation had been performed on women, or even seriously considered possible at or before Shakspere's time? The very thought of it is startling; and yet, what else are we to infer?

Leontes. ———? and all eyes
Blind with the pin and web, but theirs, theirs only,
That would unseen be wicked?

—*Winter's Tale, Act I., Sc. 2.*

Cataract or opacities of the cornea, and is referred to elsewhere in Shakspere in the same connection as pin and web.

First Gent. How now? which of your hips has the most profound sciatica?

—*Measure for Measure, Act I., Sc. 2.*

The sciatica here referred to is that which accompanies tertiary syphilis.

Lucio. Behold, behold, where Madam Mitigation comes! I have purchased as many diseases under her roof as come to——

Second Gent. To what, I pray?

Lucio. Judge.

Second Gent. To three thousand dolours a-year.

First Gent. Ay, and more.

Lucio. A French crown more.

—*Measure for Measure, Act I., Sc. 2.*

This humorous dialogue has reference to syphilis. A French crown is nothing less than a bald pate following an attack of syphilis. The repeated reference to this disease as being of or from France indicates a belief in its origin in that country.

First Gent. Thou art always figuring diseases in me; but thou art full of error; I am sound.

Lucio. Nay, not as one would say, healthy; but so sound, as things that are hollow; thy bones are hollow; impiety has made a feast of thee.

—*Measure for Measure, Act I., Sc. 2.*

Syphilitic affection of the bones.

Lucio. ;—but whilst I live, forget to drink after thee.

—*Measure for Measure, Act I., Sc. 2.*

Contamination through using the same drinking vessel as one who is suffering from syphilis.

Bottom. I will discharge it in either your straw-colored beard, your orange-tawney beard, your purple-ingrain beard, or your French-crown-colored beard, your perfect yellow.

Quince. Some of your French-crowns have no hair at all, and then you will play bare-faced.—

—*Midsummer Night's Dream, Act I., Sc. 2.*

Macbeth. Cure her of that.
Canst thou not minister to a mind diseased;
Pluck from the memory a rooted sorrow;
Raze out the written troubles of the brain;
And, with some sweet oblivious antidote,
Cleanse the stuff'd bosom of that perilous stuff,
Which weighs upon the heart?

Doctor. Therein the patient
Must minister to himself.

Macbeth. Throw physic to the dogs, I'll none of it.—
—*Macbeth, Act V., Sc. 3.*

We cannot but feel for Macbeth. He has with the moral support and encouragement of his wife committed a foul crime. She now threatens by her unconscious talking to disclose it, in fact later does so. He therefore appeals to the physician to "cure her of that" and evidently does not believe that it is impossible. The physician's answer maddens and disappoints him; hence his reply.

Constance. If I were mad, I should forget my son;
Or madly think a babe of clouts were he:
I am not mad; too well I feel
The different plague of each calamity.
—*King John, Act III., Sc. 4.*

Lear. Does any here know me? This is not Lear:
Does Lear walk thus? speak thus? where are his eyes?
Either his notion weakens, or his discernings
Are lethargized. Ha! waking? 'tis not so.
Who is that can tell me who I am?
—*King Lear, Act I., Sc. 4.*

Lear. O let me not be mad, not mad, sweet heaven!
Keep me in temper; I would not be mad!
—*King Lear, Act I., Sc. 5.*

Lear. ———: may be, he is not well:
Infirmity doth still neglect all office,

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Whereto our health is bound; we are not ourselves,
When nature, being oppressed, commands the mind
To suffer with the body:

—*King Lear, Act II., Sc. 4.*

Lear. But where the greater malady is fix'd,
The lesser is scarce felt,—
———When the mind's free
The body's delicate: The tempest in my mind
Doth from my sense take all feeling else,
Save what beats there.

—*King Lear, Act III., Sc. 4.*

Kent. Oppress'd nature sleeps:—
This rest might yet have balm'd thy broken senses
Stand in hard cure,

—*King Lear, Act III., Sc. 6.*

Old Man. Madman and beggar too.
Gloster. He has some reason, else he could not beg.

—*King Lear, Act IV., Sc. 1.*

Lear. Pray, do not mock me:
I am a very foolish fond old man,
Fourscore and upwards;—and, to deal plainly,
I fear, I am not in my perfect mind.
Methinks, I should know you, and know this man;
Yet I am doubtful: for I am mainly ignorant
What place this is; and all the skill I have
Remembers not these garments; nor I know not
Where I did lodge last night: Do not laugh at me
For, as I am a man, I think this lady
To be my child Cordelia.

Cordelia. And so I am, I am.
Physician. Be comforted, good madam: the great rage,
You see, is kill'd in him: and yet it is danger
To make him even o'er the time he has lost.
Desire him to go in; trouble him no more
Till further settling.

—*King Lear, Act IV., Sc. 7.*

Poor old king. This is to me the most pathetic scene in all of Lear. I well remember witnessing the great tragedian John

McCullough portray this character. It was superb. When he rendered the above words he was himself moved to tears. The audience was so profoundly in sympathy that there was literally not a dry eye in the house; the suffering was excruciating. I have never before or since seen an audience so profoundly moved that it could make no response. Sobs were audible in every part of the house. Cordelia could not speak her lines for sobbing while the physician had to make a great effort to speak his part. Every player not on the stage was in the wings and all as profoundly moved as were the audience. It was a great tribute to a masterful genius.

Polonius. ———. Your noble son is mad:
Mad call I it; for, to define true madness,
What is't but to be nothing else but mad?
—*Hamlet, Act II., Sc. 2.*

Can anyone even today give a better definition of madness?

Polonius. And he, repulsed, (a short tale to make),
Fell into sadness; then into a fast;
Thence to a watch; thence into weakness;
Thence to a lightness; and by this declension,
Into a madness, wherein now he raves.
—*Hamlet, Act II., Sc. 2.*

Gloster. A subtle knave! but yet it shall not serve.—
Let me see thine eyes; wink now; now open them:
In my opinion, yet thou see'st not well.
—*Part Second, King Henry Sixth, Act II., Sc. 1.*

This is a case of imposture and Gloster has set himself to expose it. He was evidently seeking for the sign of contraction and dilatations of the pupils.

King Richard. This music mads me, let it sound no more:
For though it hath holp madmen to their wits,
In me it seems it will make wise men mad.
—*King Richard Second, Act V., Sc. 5.*

We have a recent revival of the application of the soothing effect

of music in the treatment of disordered minds. The music referred to by the King was evidently discordant.

Stephano. He's in his fit now; and does not talk after the wisest. He shall taste of my bottle: if he have never drunk wine before, it will go near to remove his fit.

—*Tempest, Act II., Sc. 2.*

Sir Toby. We must deal gently with him;—this is not the way; do not you see you move him?—let me alone with him.

Fabian. Carry his water to the wise woman.

Maria. It shall be done tomorrow morning if I live.

—*Twelfth Night, Act III., Sc. 4.*

Warwick. Be patient princess; you do not know these fits
Are with his highness very ordinary;
Stand from him, give him air; he'll straight be well.

—*Part Second, King Henry Fourth, Act IV., Sc. 4.*

Cassius. He had a fever when he was in Spain,
And, when the fit was on him, I did mark
How he did shake: 'tis true, this god did shake:
His coward lips did from their color fly;
And that same eye whose bend doth awe the world,
Did lose his lustre: I did hear him groan:
Ay, and that tongue of his that bade the Romans
Mark him, and write his speeches in their books,
Alas! it cried, *Give me some drink,* Titinius;
As a sick girl.

—*Julius Cæsar, Act I., Sc. 2.*

Note the severe rigor, pale lips, dull eye, the thirst, etc., of epilepsy.

Cassius. What! did Cæsar swoon?

Casca. He fell down in the market place, and foamed at the mouth, and was speechless.

Brutus. 'Tis very like: he hath the falling sickness.

—*Julius Cæsar, Act I., Sc. 2.*

It is almost incredible that a man of Cæsar's genius, force and intellectual power should have been subject to epilepsy, yet

history so informs us. "In everything he excelled." The first general, the greatest statesman, and, with one exception (Cicero), the greatest orator of his age. He was unsurpassed as a historian, as well as a great mathematician, jurist and architect, and yet withal an epileptic.

Casca. When he came to himself again, he said, If he had done or said anything amiss, he desired their worships to think it was his infirmity.

—*Julius Cæsar, Act I., Sc. 2.*

We have here the confused state of mind following an attack of epilepsy.

Kent. A plague upon your epileptic visage!
Smile you my speeches, as I were a fool?

—*King Lear, Act II., Sc. 2.*

This quotation indicates to my mind a personal knowledge of epilepsy. Shakspere had doubtless witnessed more than one attack to have thus written of it.

Iago. My lord has fallen into an epilepsy.
This is his second fit; he had one yesterday.
Cassio. Rub him about the temples.
Iago. No, forbear:
The lethargy must have a quiet course:
If not, he foams at mouth;—and by and by
Breaks out to savage madness.

—*Othello, Act V., Sc. 2.*

Duke of York. O, then, how quickly should this arm of mine,
Now prisoner to the palsy, chastise thee
And minister correction to thy fault!

—*King Richard Second, Act II., Sc. 3.*

Here is surely a case of hemiplegia.

Lord Say. The palsy, and not fear, provokes me.

—*Part Second, King Henry Sixth, Act IV., Sc. 7.*

Beatrice. O Lord! he will hang upon him like a disease: he is sooner caught than the pestilence, and the taker runs presently mad.

—*Much Ado About Nothing, Act. I., Sc. 1.*

OBSTETRICS AND MIDWIFERY.

Sir Toby. Like Aqua-vita with a midwife.

—*Twelfth Night, Act II., Sc. 5*

Nurse. And she was wean'd—I never shall forget it,—
Of all the days of the year, upon that day;
For I had then laid wormwood to my dug,
* * * * * * * * * *
When it did taste the wormwood on the nipple
Of my dug, and felt it bitter, pretty fool!
To see it tetchy and fall out with the dug.
* * * * * * * * * *
For then she could stand alone; nay, by the rood,
She could have run and waddled all about.

—*Romeo and Juliet, Act I., Sc. 3.*

Cleopatra. Peace, peace!
Dost thou not see my baby at my breast,
That sucks the nurse asleep?

—*Antony and Cleopatra, Act V., Sc. 2.*

This reference to the asp as "my baby" requires considerable imagination. The reptile did not suck Cleopatra to sleep, but rather caused her death by its poison or virus.

Lear. Thou know'st the first time we smell the air,
We wawl and cry:—

—*King Lear, Act IV., Sc. 6.*

Pericles. ———Lucina, O
Divinest patroness, and midwife, gentle
To those that cry by night, convey thy deity
Aboard our dancing boat; make swift the pangs
Of my Queen's travails!—
* * * * * * * * * * *
A terrible childbed hast thou had, my dear;
No light, no fire: the unfriendly elements
Forgot thee utterly; nor have I time
To give thee hallow'd to thy grave, but straight

Must cast thee, scarce coffin'd, in the ooze;
Where, for a monument upon thy bones,
And aye-remaining lamps, the belching whale
And humming water must o'erwhelm thy corpse,
Lying with simple shells.

—*Pericles, Act III., Sc. 1.*

The reader will remember that Pericles was accompanied by his queen in a voyage during which a most severe storm overtook them. Through fear and the effect of the "Dancing boat" the queen, who was with-child, was prematurely delivered of a girl baby. She apparently expired, was enclosed by Pericles in a water-tight chest and consigned to the deep. The chest was quickly washed ashore, discovered at once, and the queen released and resuscitated.

Here we have, as far as the author is aware, the only gross violation of natural laws made in the Master's plays. The necessity for such a sequel existed, however, and in the happy termination of the queen's distress and perilous position, we are glad to allow unquestioned this poetic license.

Costard. Faith, unless you play the honest Trojan, the poor wench is cast away: she's quick; the child brags in her belly already; 'tis yours.

—*Love's Labor Lost, Act V., Sc. 2.*

Quickening or movement of the fetus in utero.

Clown. Sir, she came in great with child;

—*Measure for Measure, Act II., Sc. 1.*

Timon. Twin'd brothers of one womb,—
Whose procreation, residence, and birth,
Scarce is divident,—touch them with several fortunes,
The greater scorns the lesser.

—*Timon of Athens, Act IV., Sc. 3.*

Twins are also referred to in Othello, Act II., Sc. 3, in the Second Part of King Henry Sixth, Act IV., Sc. 2, and in the Comedy of Errors, Act I., Sc. 1.

Doll. Nut-hook, nut-hook, you lie. Come on; I'll tell thee what, thou

damned tripe-visaged rascal; an the child I now go with do miscarry, thou hadst better thou had'st struck thy mother, thou paper-faced villain.

Hostess. O that Sir John were come! he would make this a bloody day to somebody. But I would the fruit of her womb might miscarry!

—*Part Second, King Henry Fourth, Act V., Sc. 4.*

This passage refers to physical violence in bringing about a miscarriage.

Nut-hook a name of reproach for the beadle or baileff, an officer of the Law, because they usually were armed with a catch-pole or a pole with a hook at the end.

Doll is never at a loss for abusive epithets: her vocabulary is amply sufficient for any and all occasions.

Queen Margaret. From forth the kennel of thy womb hath crept
A hell-hound that doth hurt us all to death:
That dog, that had his teeth before his eyes
To worry lambs and lap their gentle blood;
That foul defacer of God's handy-work.

—*King Richard Third, Act IV., Sc. 4.*

The Master here calls attention among other things to the eruption of the teeth before birth, and in this instance it is not merely a poetic fancy, but is amply substantiated by history.

Richard. I, that am curtail'd of this fair proportion,
Cheated of feature by dissembling nature,
Deformed, unfinish'd, sent before my time
Into this breathing world, scarce half made up,
And that so lamely and unfashionable
That dogs bark at me, as I halt by them;—

—*King Richard Third, Act I., Sc. 1.*

Shakspere portrays Richard as horribly deformed at birth. It were unfortunate thus to picture this prince, for we have it from reliable sources that while he was not perfectly fashioned, yet he was most courteous, pleasing in manner, albeit somewhat ambitious to secure the crown of England and resorted to unwarranted means to this end.

Gloster. Why, love forswore me in my mother's womb;
And, for I should not deal in her soft laws,

She did corrupt frail nature with some bribe
To shrink mine arm up like a withered shrub;
To make an envious mountain on my back,
Where sits deformity to mock my body;
To shape my legs of an unequal size;
To disproportion me in every part,
Like to a chaos, or an unlicked bear-whelp
That carries no impression like the dam.
—*Part Third, King Henry Sixth, Act III., Sc. 2.*

The Duke of Gloster here referred to is he who afterward became King Richard the Third. (See comment on page 43.)

With such a multitude of incongruous shortcomings one can scarcely wonder that Gloster should endeavor to make amends by seeking to be exalted as the sole majesty of England.

King Henry. Thy mother felt more than a mother's pain,
And yet brought forth less than a mother's hope;
To wit, an indigested and deformed lump,
Not like the fruit of such a goodly tree.
Teeth hadst thou in thy head, when thou wast born,
To signify thou cam'st to bite the world:
—*Part Third, King Henry Sixth, Act V., Sc. 6.*

Falstaff. My lord, I was born about three of the clock in the afternoon, with a white head, and something of a round belly.
—*Part Second, King Henry Fourth, Act I., Sc. 2.*

Robert. ——; and took it, on his death,
That this, my mother's son, was none of his;
And, if he were, he came into the world
Full fourteen weeks before the course of time.
—*King John, Act I., Sc. 2.*

This is a case of illegitimacy rather than premature birth, as "fourteen weeks before the course of time" would bring the event before the viable period of pregnancy.

Hotspur. Diseased nature oftentimes breaks forth
In strange eruptions; oft this teeming earth
Is with a kind of colic pinch'd and vex'd
By the imprisoning of unruly wind

Within her womb; which, for enlargement striving,
Shakes the old beldam earth and topples down
Steeples and moss-grown towers. At your birth
Our grandam earth, having this distemperature,
In passion shook.

—*Part First, King Henry Fourth, Act III., Sc. 1.*

Birth during a volcanic eruption.

King Henry. Now, Lovell, from the queen what is the news?
Lovell. I could not personally deliver to her
What you commanded me, but by her woman
I sent your message; who returned her thanks
In the greatest humbleness, and desired your highness
Most heartily to pray for her.
King Henry. What say'st thou? ha!
To pray for her? What, is she crying out?
Lovell. So said her woman; and that her sufferance made
Almost each pang a death.
King Henry. Alas, good lady!
Suffolk. God safely quit her of her burden, and
With gentle travail, to the gladning of
Your highness with an heir!

—*King Henry Eighth, Act V., Sc. 1.*

Gloster. For I have often heard my mother say
I came into the world with my legs forward:
Had I not reason think ye, to make haste,
And seek their ruin that usurp'd our right?
The midwife wondered: and the woman cried,
"O Jesus bless us, he is born with teeth!"

—*Part Third, King Henry Sixth, Act V., Sc. 6.*

Macduff. ————, Macduff was from his mother's womb
Untimely ripp'd.

—*Macbeth, Act V., Sc. 7.*

Mother. Lucina lent me not her aid,
But took me in my throes,
That from me was Posthumus rip'd
Came crying 'mongst his foes.
A thing of pity.

—*Cymbeline, Act V., Sc. 4.*

Macduff, Posthumus and Cæsar came into the world through the

operation of Cæsarian section. Indeed the operation takes its name from the fact that the great Julius Cæsar was so brought into the world.

Queen Elizabeth. And I the rather wean me from despair,
For love of Edward's offspring in my womb:
This is it that makes me bridle passion,
And bear with mildness my misfortune's cross;
Ay, ay, for this I draw in many a tear,
And stop the rising of blood-sucking sighs,
Lest with my sighs or tears I blast or drown
King Edward's fruit, true heir to the English crown.
—*Part Third, King Henry Sixth, Act IV., Sc. 4.*

Here we have a description of the emotions; being powerful enough to cause the death of the unborn child.

King Henry. First, methought,
I stood not in the smile of heaven; who had
Commanded nature, that my lady's womb,
If it conceived a male child by me, should
Do no more offices of life to't, than
The grave does to the dead: for her male issue
Or died where they were made, or shortly after
This world had air'd them:
—*King Henry Eighth, Act II., Sc. 4.*

Death of the fetus and its retention in the womb, which was one of the king's excuses for seeking to divorce Queen Catherine.

Paulina. This child was prisoner to the womb; and is,
By law and process of great nature, thence
Free'd and enfranchis'd: not a party to
The anger of the king; nor guilty of,
If any be, the trespass of the queen.
—*Winter's Tale, Act II., Sc. 2.*

The sad tale of Perdita's abandonment; the fate of Antigonas; the wooing of Florizel; the manner of the reconciliation of the king to his lost queen Hermione, makes a story of great interest.

La Purcelle. (Joan of Arc).
I am with child, ye bloody homicides:
Murder not then the fruit within my womb,
Although ye hale me to a violent death.
—*First Part, King Henry Sixth, Act V., Sc. 4.*

This final appeal to the law which exempted one with child from capital punishment did not avail.

THERAPEUTICS, PHARMACY AND TOXICOLOGY.

Helena. You know my father left me some prescriptions
Of rare and prov'd effects, such as his reading,
And manifest experience had collected.
—*All's Well That Ends Well, Act I., Sc. 3.*

Lafeu. ————: I have seen a medicine
That's able to breathe life into a stone;
Quicken a rock, and make you dance canary,
With sprightly fire and motion; whose simple touch
Is powerful to arrise King Pepin, nay,
To give great Charlemain a pen in's hand
And write to her a love-line.
—*All's Well That Ends Well, Act II., Sc. 1.*

This "medicine" is a charming "lady doctor."

Archidamus. We will give you sleepy drinks, that your senses, unintelligent of our insufficience, may, though they cannot praise us, as little accuse us.
—*Winter's Tale, Act I., Sc. 1.*

Narcotic, doubtless opium as a decoction mixed with wine.

Camillo. Sir, my lord,
I could do this; and that with no rash potion,
But with a ling'ring dram, that should not work
Maliciously like poison:
—*Winter's Tale, Act I., Sc. 2.*

Reference is elsewhere made to the poison given to work a long time after.

Florizel. Preserver of my father, now of me;
The medicine of our house!——

—*Winter's Tale, Act IV., Sc. 3.*

Abbess. Be patient: for I will not let him stir,
Till I have used the approved means I have,
With wholesome syrups, drugs, and holy prayers
To make of him a formal man again:

—*Comedy of Errors, Act V., Sc. 1.*

Cordelia. What can man's wisdom do,
In the restoring his bereaved sense?
Physician. There is a means, madam:
Our foster-nurse of nature is repose,
The which he lacks; that to provoke in him,
Are many simples operative, whose power
Will close the eye of anguish.
Cordelia. All bless'd secrets,
All you unpublish'd virtues of the earth,
Spring with my tears! be aidant, and remediate,
In the good man's distress!—

—*King Lear, Act IV., Sc. 4.*

"Simples operative" here refers to hypnotics and anodynes.

Gonzalo. ————: you rub the sore,
When you should bring the plaster,
Antonio. And most chirurgeonly.

—*Tempest, Act II., Sc. 1.*

Costard. ————, no salve, sir, but a plain plantain!

—*Love's Labor Lost, Act III., Sc. 1.*

When Moth refers to Costard's broken shin, Armado thinks it a riddle and calls for l'envoy meaning a salve. Costard sees no riddle, no enigma, no l'envoy, declaring that there is "no salve in them all." He wants but a plain plantain for his wound.

Nurse. Is this the poultice for my aching bones?

—*Romeo and Juliet, Act II., Sc. 5.*

Falstaff. Come let me pour in some sack to the Thames water; for my belly's as cold as I had swallowed snow-balls for pills to cool the reins—(passions.) Call her in.

—*Merry Wives of Windsor, Act III., Sc. 5*

This quotation refers to the aphrodisiac action of alcoholic drinks. Sack was a strong white wine obtained in Shakspere's time from Italy and Spain.

Cornelius. But I beseech your grace, (without offence;
My conscience bids me ask;) wherefore you have
Commanded of me those most poisonous compounds,
Which are the movers of a languishing death;
But, though slow, deadly?

Queen. I wonder, doctor,
Thou ask'st me such a question: Have I not been
Thy pupil long? Hast thou not learn'd me how
To make perfumes? distill? preserve? yea, so,
That our great King himself doth woo me oft
For my confections? Having thus far proceeded,
(Unless thou think'st me devilish) is't not meet
That I did amplify my judgment in
Other conclusions? I will try the forces
Of these thy compounds on such creatures as
We count not worth the hanging, (but none human.)
To try the vigor of them, and apply
Allayments to their act; and by them gather
Their several virtues and effects.

Cornelius. Your highness
Shall from this practice but make hard your heart:
Besides, the seeing these effects will be
Both noisome and infectious.
(Aside) I do not like her. She doth think she has
Strange lingering poisons:
* * * * * Those she has
Will stupefy and dull the sense awhile:
Which first, perchance, she'll prove on cats and dogs:
Then afterward up higher: but there is
No danger in what show of death it makes,
More than the locking up the spirits a time,
To be more fresh reviving.

—*Cymbeline, Act I., Sc. 6.*

Here we find mention of vivisection or the testing of remedies on the lower animals.

Pisano. Here is a box: I had it from the queen;
What's in't is precious; if you are sick at sea,
Or stomach-qualmed at land, a dram of this
Will drive away distemper.———

—*Cymbeline, Act III., Sc. 4.*

This box it will be remembered contained poison, intended for Imogene, of whom the Queen was jealous.

Cornelius. She did confess she had
For you a mortal mineral; which, being took,
Should by the minute feed on life, and ling'ring
By inches waste you:
* * * * * * * * *
The queen, sir, very oft importun'd me
To temper poisons for her; still pretending
The satisfaction of her knowledge only
In killing creatures vile, as cats and dogs,
Of no esteem: I, dreading that her purpose
Was of more danger, did compound for her
A certain stuff, which, being ta'en, would cease
The present power of life; but, in short time,
All offices of nature should again
Do their due functions.

—*Cymbeline, Act V., Sc. 5.*

The learned class in Shakespeare's time and for ages before were much given to the study of chemistry and, in a way, pharmacy; chemistry in the hope of fame and fortune, pharmacy more for the poisonous substances than the curative remedies. To poison an enemy was the easiest means of getting rid of him without the friends being able to fasten the guilt upon any one. Analytical chemistry had not been so developed as to make the detection of poisons certain. For this reason the practice of wholesale and individual cases of poisonings were, as history informs us, so general.

Banquo. Were such things here as we do speak about?
Or have we eaten on the insane root
That takes the reason prisoner?

—*Macbeth, Act I., Sc. 3.*

Hemlock was called the insane root because it was supposed to cause insanity in those who used it.

Lady Macbeth. I have drugged their possets,
That death and nature do contend about them
Whether they live, or die.

—*Macbeth, Act II., Sc. 2.*

Evidently opium in some form.

Porter. ——and drink, sir, is a great provoker of three things.
Macduff. What three things does drink especially provoke?
Porter. Marry, sir, nose painting, sleep, and urine.
Lechery, sir, it provokes, and unprovokes; it provokes the desire, but it takes away the performance: therefore much drink may be said to be an equivocator with lechery: it makes him, and it mars him; it sets him on, and it takes him off; it persuades him, and disheartens him; makes him stand to, and not stand to: in conclusion, equivocates him in a sleep, and, giving him the lie, leaves him.

—*Macbeth, Act II., Sc. 3.*

A clear and concise statement of the effects of alcohol, particularly its effect upon the sexual organs.

Witches. Root of hemlock digg'd i' the dark;
Liver of blaspheming Jew;
Gall of goat, and slip of yew,
Silver'd in the moon's eclipse.

—*Macbeth, Act IV., Sc. 1.*

It is difficult to isolate the drugs or poisons made use of by Shakspere. The poison is needed to work out in part the wishes of the author and it does not appear that he always knew of their exact toxicological action. However, the dramatic effect is ever in evidence; when wanted they serve a well defined purpose.

Brabantio. Judge me the world, if 'tis not gross in sense,
That thou hast practiced on her with foul charms;
Abused her delicate youth with drugs or minerals,
That weaken motion:—I'll have it disputed on;
'Tis probable, and palpable to thinking.
I therefore apprehend and do attach thee,
For an abuser of the world, a practiser
Of arts inhibited and out of warrant.

* * * * * * * * *

I therefore vouch again,
That with some mixture powerful o'er the blood,
Or with some dram conjured to this effect,
He wrought upon her.

—*Othello, Act I., Sc. 2.*

Charms and love potions were thought to influence either sex and was a means to secure the affections of the one loved. Even to this day the negro of the South believes in charms. Magnetic ore is most efficient and needs but to be carried by one to have the effect of a hoodoo or evil charm made inoperative while love-powders are often used, druggists selling some harmless powder to be used in the food or drink unknown to the taker.

Iago. ; fill thy purse with money: the food that to him now is as luscious as locusts, shall be to him shortly as bitter as coloquintida.

—*Othello, Act I., Sc. 3.*

Colocynth.

Iago. Look, where he comes! Not poppy, nor mandragora,
Nor all the drowsy syrups of the world,
Shall ever medicine thee to that sweet sleep
Which thou ow'dest yesterday.

—*Othello, Act III., Sc. 3.*

Unhappy and doomed Othello. Never were loyalty and perfect love so abused. Calumny, deceit, ingratitude, nor the fiends of hell were enemies like unto your Ancient. Brave, and courageous to a degree, ready to meet like the gladiators in Rome any number of goodly men in single combat, thy strong heart, fearless of injury, soldier to the core, this is not of the kind thou hast met; she the chaste, the beautiful, the good must be assassinated and thy noble self damned in self destruction. Aside from Hamlet and Lear, there is no character in fiction so real, so human to which the student of psychology can turn with so much profit. Alas, unhappy Othello.

Iago. The Moor already changes with my poison:
Dangerous conceits are, in their nature, poisons:

Which, at the first, are scarce found to distaste;
But, with a little act upon the blood,
Burn like the mines of sulphur.

—*Othello, Act III., Sc. 3.*

Othello. Drop tears as fast as the Arabian trees
Their medicinal gum.

—*Othello, Act V., Sc. 2.*

Cleopatra. Ha, ha!
Give me to drink mandragora.
Charmian. Why, madam?
Cleopatra. That I might sleep out this great-gap of time,
My Antony is away.

—*Antony and Cleopatra, Act I., Sc. 5.*

Mandragora a hypnotic was also esteemed an aphrodisiac.

Falstaff. If the rascal have not given me medicines to make me love him, I'll be hanged; it could not be else; I have drunk medicines.—
Poins. Hal! a plague upon you both.

—*Part First, King Henry Fourth, Act II., Sc. 2.*

This passage refers to the aphrodisiac action of some drug taken with drink.

Falstaff. ————though the chamomile, the more it is trodden, the faster it grows.

—*Part First, King Henry Fourth, Act II., Sc. 4.*

King Henry. And thou shalt prove a shelter to thy friends;
A hoop of gold, to bind thy brothers in;
That the united vessel of their blood,
Mingle with venom of suggestion,
(As, force perforce, the age will pour it in,)
Shall never leak, though it do work as strong
As aconitum, or rash gunpowder.

—*Part Second, King Henry Fourth, Act IV., Sc. 4.*

Hubert. The king, I fear, is poisoned by a monk:
I left him almost speechless, and broke out
To acquaint you with this evil; that you might

The better arm you to the sudden time,
Than if you had at leisure known of this.

Bastard. How did he take it? Who did taste to him?

Hubert. A monk, I tell you; a resolved villain,
Whose bowels suddenly burst out: the king
Yet speaks, and, peradventure, may recover.

—*King John, Act V., Sc. 6.*

The quotation "bowels suddenly burst out" doubtless refers to a sudden diarrhea which is a symptom of arsenical poisoning. It will be remembered the King was poisoned presumably by arsenic, as was the monk who to induce him to partake, himself drank a portion of the fluid.

Norfolk. What are you chaf'd?
Ask God for temperance; that's the appliance only,
Which your disease requires.

—*King Henry Eighth, Act I., Sc. 1.*

Duke of Suffolk. Wherefore should I curse?
Would curses kill, as doth the mandrake's groan,
I would invent as bitter searching terms,
As curst, as harsh, and horrible to hear,
* * * * * * * * *
As lean-faced envy.

—*Part Second, King Henry Sixth, Act III., Sc. 2.*

MANDRAGORA ROOT.

Mandrake here mentioned is not our May apple but a species of solanacea, which flourishes in Asia Minor. It is identified with the mandragora so often mentioned by Shakspere.

Frequent mention of mandragora is made by the classic writers. It was esteemed as possessing other than medicinal or toxi-

cological properties, because of the superstition that it grew best and possessed greater worth when grown over the buried remains of an executed criminal. The peculiar shape of the roots—forked and divergent—gives it a somewhat human-like appearance. The gods of mythology were supposed to make frequent use of this plant and its roots. When the plant was pulled from above the dead, groans and shrieks were heard and those who were unfortunate enough to hear them either died at once or became insane. It can, therefore, be easily imagined that the great peril in securing so valuable a plant induced those wishing it to resort to some measure that would free the person from the hearing of the fatal noises. One method was to entice a dog into the burial ground, fasten him by cords to the plant, and after sealing one's ears with some substance which would prevent hearing the perilous sounds, run for life; the dog would struggle to follow and thus tearing the plant from the ground bring it to his master, who happily escaped the miserable end. The dog was, however, a sacrifice, as he was soon to perish.

Juliet, in Romeo and Juliet, Act IV., Sc. 3, refers to this superstition regarding the evil sounds:—

> "For these many hundred years the bones
> Of all my buried ancestors are packed
> * * * * * * * *
> So early waking,—what with loathsome smells,
> And shrieks like mandrakes torn out of the earth,
> That living mortals, hearing them run mad."

It was esteemed as a local anesthetic, having been given as a wine of mandragora to those about to be crucified.

The mandrake or mandragora is found by modern investigations to possess narcotic properties—producing in some instances hysterical excitability—as well as being a hypnotic similar in action to belladonna. An alkaloid has been extracted which has properties similar to the mydriatics, atropin and hyoscyamin. It was used by the ancients also as an aphrodisiac.

Friar Lawrence. Now, ere the sun advance his burning eye,
The day to cheer, and night's dank dew to dry,

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I must up fill this osier cage of ours
With baleful weeds, and precious-juiced flowers.
* * * * * * * *
Many for many virtues excellent,
None but for some, and yet all different,
O, mickle is the powerful grace that lies
In herbs, plants, stone, and their true qualities:
* * * * * * * *
Within the infant rind of this weak flower
Poison hath residence and med'cine power;
For this, being smelt, with that part cheers each part;
Being tasted, slays all senses with the heart.
—*Romeo and Juliet, Act II., Sc. 3.*

Friar Lawrence. Take thou this phial, being then in bed,
And this distilled liquor drink thou off:
When, presently, through all thy veins shall run
A cold and drowsy humour, for no pulse shall keep
His natural progress, but surcease to beat:
No warmth, no breath, shall testify thou liv'st,
The roses in thy lips and cheeks shall fade
To paly ashes; thy eyes' windows fall,
Like death, when he shuts up the day of life;
Each part, depriv'd of supple government,
Shall, stiff, and stark, and cold, appear like death.
And in this borrow'd likeness of shrunk death
Thou shalt remain full two-and-forty-hours,
And then awake as from a pleasant sleep.
—*Romeo and Juliet, Act IV., Sc. 1.*

It is impossible to say what, if any drug or combination of drugs was used by Friar Lawrence to produce this semblance of death in Juliet. We know that there are numerous narcotics which will produce prolonged sleep, but in all cases the pulse is in evidence. There is also bodily warmth and breathing which can be determined. Opium which was largely used in Shakspere's time and in fact for centuries before could not have been the drug here described. While opium pushed to complete narcosis will produce apparent death, there would surely be recovery or death short of "two and forty hours." Besides this semblance of death would have been discovered by the stertorous breathing, and this alone would have been sufficient to disclose to Paris, life in Juliet.

Mandragora as elsewhere stated was regarded as a most powerful narcotic and anesthetic. It was given to condemned criminals before their execution to lessen their mental distress, but from our present knowledge of this drug it could not have produced the effects described by Friar Lawrence. However, we must make a certain allowance for poetic license, and stand amazed at so complete and accurate a description of drug narcosis.

It has occurred to me that the condition of Juliet was brought about through hypnosis or suggestion. We know that a condition of catalepsy can be produced through hypnosis and that this state could exist for a considerable time without injury to the subject. This was probably what was resorted to by the good Friar. Men of his class and calling were well versed in occult and other sciences, in fact but that they were more or less conversant with science and thus able to pass their knowledge to their successors we would have lost much of what we now know of ancient science, art and literature, during the medieval or dark ages when it was only the church that was able to preserve this knowledge.

Romeo. I do remember an apothecary,—
And hereabout he dwells,—whom late I noted
In tatter'd weeds, with overwhelming brows,
Culling his simples; meagre were his looks,
Sharp misery had worn him to the bones:
And in his needy shop a tortoise hung,
An Alligator stuff'd, and other skins
Of ill-shap'd fishes; and about his shelves
A beggarly account of empty boxes,
Green earthen pots, bladders, and musty seeds,
Remnants of packthread, and old cakes of roses,
Were thinly scattered to make up a show.
Noting this penury, to myself I said—
An if a man did need a poison now,
Whose sale is present death in Mantua,
Here lives a caitiff wretch would sell it him.
O, this same thought did but forerun my need;
And this same needy man must sell it me.
As I remember, this should be the house;
Being holiday, the beggar's shop is shut,—
What, ho! apothecary!

Apothecary. Who calls so loud?

Romeo. Come, hither, man.—I see that thou art poor;
Hold, there is forty ducats: let me have
A dram of poison: such soon-speeding gear
As will dispose itself through all the veins,
That the life-weary taker may fall dead,
And that the trunk may be discharg'd of breath
As violently, as hasty powder fir'd
Doth hurry from the fatal cannon's womb.
Apothecary. Such mortal drugs I have; but Mantua's law
Is death to any he that utters them.
Romeo. Art thou so bare and full of wretchedness,
And fear'st to die? Famine is in thy cheeks,
Need and oppression stareth in thine eyes,
Upon thy back hangs ragged misery;
The world is not thy friend, nor the world's law;
The world affords no law to make thee rich;
Then be not poor, but break it, and take this.
Apothecary. My poverty, but not my will, consents.
Romeo. I pay thy poverty, and not thy will.
Apothecary. Put this in any liquid thing you will,
And drink it off; and, if you had the strength
Of twenty men, it would despatch you straight.
Romeo. There is thy gold; worse poison to men's souls,
Doing more murther in this loathsome world,
Than these poor compounds that thou mayst not sell:
I sell thee poison, thou hast sold me none.
Farewell; buy food, and get thyself in flesh.
Come, cordial, and not poison; go with me
To Juliet's grave, for there I must use thee.

—*Romeo and Juliet, Act V., Sc. 1.*

This could have been one or more of many drugs. It was probably aconite.

Shakspere has given us much of his knowledge of pharmacy, in Romeo and Juliet. Romeo's description of the apothecary is familiar to all. "A beggarly account of empty boxes" is still much in evidence in the drug store. As we advance in hygienic and sanitary knowledge the necessity for drugs becomes less. Were it not for the cigar case, the soda fountain, the toilet goods and other accessories to the drug store, there would be fewer stores.

Romeo. O, true apothecary!
Thy drugs are quick.—Thus with a kiss I die.

—*Romeo and Juliet, Act V., Sc. 3.*

Ghost. With juice of cursed hebenon,
————————: whose effect
Holds such an enmity with blood of man
That, swift as quicksilver, it courses through
The natural gates and alleys of the body;
And, with a sudden vigour, it dost posset
And curd, like aigre* droppings into milk,
The thin and wholesome blood:————

—*Hamlet, Act I., Sc. 5.*

Hebenon is here a word of doubtful meaning. It probably refers to henbane or hyoscyamus niger. The quarto editions of Shakspere have it hebona. The folio which I prefer to follow, hebenon. Henbane is a poisonous plant especially destructive to domestic fowls; hence this name henbane. It does not produce leprous symptoms as detailed by the Ghost, but the law of signatures—i.e., some outward sign appearing on plants, minerals and other objects, superstitiously believed in ancient times to indicate a medicinal quality, as for instance, the yellow color of certain flowers was believed to show their efficacy in jaundice—prevailed in Shakspere's time, and the leprous effects may have been founded on the clammy appearance of the plant.

Dodoeus decribed a species of yew as being "altogether venomous and against man's nature. Such as do but slepe under the shadow thereof become sicke, and sometimes they die."

Henbane juice was used by the Gauls to poison their arrows.

Laertes. And, for that purpose, I'll anoint my sword.
I bought an unction of a mountebank,
So mortal, that but dip a knife in it,
Where it draws blood, no cataplasm so rare,
Collected from all simples that have virtue
Under the moon, can save the thing from death,
That is but scratch'd withal: I'll touch my point
With this contagion; that, if I gall him slightly,
It may be death.

—*Hamlet, Act IV., Sc. 7.*

Certain alkaloids were used, among them curare, by the South American natives to anoint their arrow points when at war with their enemies. One wounded by these arrows was almost sure to die within a few hours. Blyth states in his

*Acid.

work on poisons that the early savages discovered that weapons soiled with the blood of former victims made wounds fatal. From these observations it was only a step to experiment with plants, etc., as a result the juices of several plants were found to cause fatal wounds.

ANATOMY.

Clown. Thou hast spoken for us, Madonna, as if thy eldest son should be a fool; whose skull Jove cram with brains, for here he comes; one of thy kin has a most weak pia mater.

—*Twelfth Night, Act I., Sc. 5.*

Pia-mater used in this connection refers to its instrumentality in the intellectual development of the individual. Pia-mater is also referred to in Troilus and Cressida, Act II., Sc. 1.

Hamlet. My fate cries out
And makes each petty artery in this body—
As hardy as the Nemean lion's nerve.

—*Hamlet, Act. I., Sc. 4.*

Queen. Your bedded hair, like life in excrements,
Starts up and stands on end,—

—*Hamlet, Act III., Sc. 4.*

Antipholus of S. Why is time such a niggard of hair, being, as it is, so plentiful an excrement?

—*Comedy of Errors, Act II., Sc. 2.*

Autolycus. Let me pocket up my pedler's excrement,
(Takes off his false beard.)

—*Winter's Tale, Act IV., Sc. 3.*

Armado. ————; and with his royal finger, thus, dally with my excrement, with my mustachio.

—*Love's Labour Lost, Act V., Sc. 1.*

Bassanio. And these assume but valour's excrement,
To render them redoubted.
—*Merchant of Venice, Act III., Sc. 2.*

The word excrement is frequently used by Shakspere to describe the hair which is properly an excrementitious substance. Excrement is defined as an appendage or excrescence.

Sir Toby. For Andrew, if he were opened, and you find so much blood in his liver as will clog the foot of a flea, I'll eat the rest of the anatomy.
—*Twelfth Night, Act III., Sc. 2.*

Sir Toby's estimate of Sir Andrew Aguecheek's courage was in no way exaggerated as the meeting between him and Viola later clearly proves.

The liver was not only considered the seat of courage but of love, and for the liver to be without blood was to indicate the coward. White livered (bloodless livered) was a common epithet applied to those lacking in courage.

PHYSIOLOGY.

Brutus. You are my true and honorable wife;
As dear to me as are the ruddy drops
That visit my sad heart.
—*Julius Cæsar, Act II., Sc. 1.*

Shakspere here displays what seems to be a marvellous acquaintance with physiology as well as with medicine. The last two foregoing lines, as quoted, indicate a knowledge of the circulation of the blood. Again in Hamlet (Act I., Sc. 5) we find:

——— "Holds such an enmity with blood of man
That swift as quicksilver it courses through
The natural gates and alleys of the body;
And with a sudden vigor it doth posset (coagulate)
And curd, like aigre* droppings into milk,
The thin and wholesome blood;"

This is indeed in anticipation of Harvey. The play of Hamlet was first printed in 1603 while Harvey made known his

*Acid.

discovery of the circulation of the blood in 1628, although he states in his *Exercitatio-Anatomisa de Motu Cordis et Sanguinis* that he had for nine years been demonstrating the subject in his lectures at the College of Physicians in London. Even this would, if allowed, carry him back only as far as 1619 or sixteen years after the first appearance in print of Hamlet. *Julius Caesar* was first published in 1623.

See also page 63 for a confirmation of Shakspere's knowledge of the circulation of the blood.

Menenius. There was a time when all the body's members
Rebell'd against the belly; thus accus'd it:—
That only like a gulf it did remain
I' the midst o' the body, idle and unactive,
Still cupboarding the viand, never bearing
Like labour with the rest; when the other instruments
Did see and hear, devise, instruct, walk, feel,
And mutually participate; did minister
Unto the appetite and affection common
Of the whole body. The belly answered,—

Second Citizen. Well, sir, what answer made the belly?

Menenius. Sir, I shall tell you.—With a kind of smile,
Which ne'er came from the lungs, but even thus,
(For look you, I may make the belly smile
As well as speak,) it tauntingly replied
To the discontented members, the mutinous parts
That envied his receipt; even so most fitly
As you malign our senators, for that
They are not such as you.

Second Citizen. Your belly's answer: What!
The kingly crowned head, the vigilant eye,
The counsellor heart, the arm of our soldier,
Our steed the leg, the tongue the trumpeter,
With other muniments and petty helps
In this our fabric, if that they——

Menenius. When then?—
'Fore me this fellow speaks!—What then? What then?

Second Citizen. Should by the cormorant belly be restrain'd
Who is the sink o' the body.——

Menenius. Well, what then?

Second Citizen. The former agents, if they did complain,
What could the belly answer?

Menenius. I will tell you;
If you'll bestow a small (of what you have little)
Patience awhile, you'll hear the belly's answer.

* * * * * * * *

Note me this, good friend,
Your most grave belly was deliberate,
Not rash like his accusers, and thus answer'd.
"True is it, my incorporate friends," quoth he,
"That I receive the general food at first,
Which you do live upon: and fit it is;
Because I am the storehouse, and the shop
Of the whole body: But if you do remember,
I send it through the rivers of your blood,
Even to the court, the heart, to the seat o' the brain,
And through the cranks and offices of man:
The strongest nerves, and small inferior veins
From me receive that natural competency
Whereby they live: And though that all at once,
You, my good friends, ("this says the belly,") mark me,—

* * * * * * * * * *

"Though all at once cannot
See what I do deliver out to each;
Yet can I make my audit up, that all
From me do back receive the flour of all,
And leave me but the bran."

* * * * * * * * * *

The senators of Rome are this good belly,
And you the mutinous members: For examine
Their councils and their cares; digest things rightly,
Touching the weal o' the common; you shall find,
No public benefit, which you receive,
But it proceeds, or comes, from them to you,
And no way from yourselves.—What do you think?
You, the great toe of this assembly?—

—*Coriolanus, Act I., Sc. 1.*

Truly, here is a startlingly accurate statement of digestion and nutrition and the part played by the intestines, since the belly means the abdominal cavity. Here also is confirmation of Shakspere's knowledge of the circulation of the blood:

"I send it through the rivers of your blood
Even to the court, the heart."

Capulet. My child is yet a stranger in the world;
She hath not seen the change of fourteen years.
Let two more summers wither in their pride,
Ere we may think her ripe to be a bride.
Paris. Younger than she are happy mothers made.
Capulet. And too soon marr'd are those so early made.

—*Romeo and Juliet, Act I., Sc. 2.*

Puberty is here placed at fourteen years.

Paulina. ————————Behold, my lords,
Although the print be little, the whole matter
And copy of the father; eye, nose, lip,
The trick of his frown, his forehead; nay, the valley,
The pretty dimples of his chin and cheek; his smiles;
The very mould and frame of hand, nail, finger;
And thou, good goddess Nature, which hast made it
So like to him that got it, if thou hast
The ordering of the mind too, 'mongst all colors
No yellow in't; lest she suspect, as he does,
Her children not her husband's!
—*Winter's Tale, Act II., Sc. 3.*

Inheritance of physical, moral and mental traits.

Oberon. And the blots of nature's hand
Shall not in their issue stand;
Nor mole, hare-lip, nor scar,
Nor mark prodigious, such as are
Despised in nativity,
Shall upon their children be.
—*Midsummer Night's Dream, Act V., Sc. 2.*

Bastard. Madam, I was not old Sir Robert's son;
Sir Robert might have eat his part in me
Upon Good Friday, and ne'er broke his fast:
Could he get me? Sir Robert could not do it;
We know his handy-work:—Therefore, good mother,
To whom am I beholden for these limbs?
Sir Robert never holp to make this leg.
—*King John, Act I., Sc. 1.*

The law of heredity is here clearly stated.

Lepidus. I must not think there are
Evils enow to darken all his goodness:
His faults, in him, seem as the spots of heaven,
More fiery by night's blackness; hereditary
Rather than purchased; what he cannot change,
Than what he chooses.
—*Antony and Cleopatra, Act I., Sc. 4.*

Holofernes. This is a gift that I have, simple, simple; a foolish extravagant spirit, full of forms, figures, shapes, objects, ideas, apprehensions,

motions, revolutions: these are begot in the ventricle of memory, nourished in the womb of pia mater, and delivered upon the mellowing of occasion:
—*Love's Labour Lost, Act IV., Sc. 2.*

Pia mater, (dutiful or kind mother) is elsewhere used by Shakspere but with entirely different meaning. In Twelfth Night, Act I., Sc. 5, for instance, it refers to the brain or rather, intellect. The Clown declares to Olivia "You have a relative with a most weak pia-mater." Here, however, it refers to the membrane covering the brain.

The belief was and is that the brain is nourished through the pia mater, hence to have a weak pia mater was to have a weak intellect.

The ventricle of memory refers to an ancient theory that there were only three ventricles in the brain. In the first ventricle we had the origin of the "five wits" or special senses, in the second, thought, and in the third, memory (Ventricle of memory).

This evidence—profound as it is—of the Master's knowledge of the physiology of the brain is but one of many evidences of his prodigious learning. How and where he found opportunities to acquire such knowledge amazes even the learned of to-day. If other evidence of Shakspere's right to membership in the Guild of Medicine were wanting, this and the reference to the physiological functions of digestion and assimilation as exhibited in Coriolanus, Act I., Sc. 1, would be amply sufficient.

Suffolk. For Henry, son unto a conqueror,
Is likely to beget more conquerors,
If with a lady of so high resolve
As is fair Margaret he be link'd in love.
—*Part First, King Henry Sixth, Act V., Sc. 5.*

Second Lord. That such a crafty devil as is his mother
Should yield the world this ass! a woman, that
Bears all down with her brain; and this her son
Cannot take two from twenty for his heart,
And leave eighteen.
—*Cymbeline, Act II., Sc. 1.*

Showing absence of hereditary traits of character; thus reversing the law of heredity.

Duchess. He is my son, ay, and therein my shame,
Yet from my dugs he drew not this deceit.
—*King Richard Third, Act II., Sc. 2.*

Here we have our attention directed to the belief still held by many, that mental and moral traits of character are influenced through the character of her who suckles the child.

Friar. I have marked
A thousand blushing apparitions start
Into her face; a thousand innocent shames
In angel whiteness bear away those blushes;
And in her eye there hath appear'd a fire,
To burn the errors that these princes hold
Against her maiden truth:
—*Much Ado About Nothing, Act IV., Sc. 1.*

We have here evidence that the Master was a keen observer.

Charmian. Nay, if an oily palm be not fruitful prognostication, I cannot scratch mine ear.
—*Antony and Cleopatra, Act I., Sc. 2.*

A moist or oily palm was considered an evidence of fruitfulness.

Othello. Give me your hand: This hand is moist my lady.
Desdemona. It yet has felt no age, nor known no sorrow.
Othello. This argues fruitfulness, and liberal heart:
Hot, hot and moist; this hand of yours requires
A sequester from liberty, fasting and prayer,
Much castigation, exercise devout;
For here's a young and sweating devil here,
That commonly rebels.
—*Othello, Act III., Sc. 4.*

Lear. Hear, Nature, hear; dear goddess, hear!
Suspend thy purpose, if thou did'st intend
To make this creature fruitful!
Into her womb convey sterility;
Dry up in her the organs of increase;
And from her derogate body never spring
A babe to honor her! If she must teem,
Create her child of spleen, that it may live,

And be a thwart disnatur'd torment to her!
Let it stamp wrinkles in her brow of youth;
With cadent tears fret channels in her cheeks;
Turn all her mother's pains and benefits
To laughter and contempt; thus she may feel
How sharper than a serpent's tooth it is
To have a thankless child!—

—*King Lear, Act I., Sc. 4.*

Lear's curse, an unequalled effort, so horrible in its conception and forceful in its execution, is inserted as an evidence of the Master's versatility, as well as its reference to physiological processes.

Theseus. Therefore, fair Hermia, question your desires,
Know of your youth, examine well your blood,
Whether, if you yield not to your father's choice,
You can endure the livery of a nun;
For aye to be in shady cloister mew'd,
To live a barren sister all your life,
Chanting faint hymns to the cold fruitless moon.
Thrice blessed they, that master so their blood,
To undergo such maiden pilgrimage:
But earthlier happy is the rose distill'd,
Than that, which, withering on the virgin thorn,
Grows, lives and dies, in single blessedness.

—*Midsummer Night's Dream, Act I., Sc. 1.*

That it is not good for man to dwell alone may be better said of woman. Speaking only of the physical side and leaving the moral issue to other and more competent minds, my observation is that the desire for maternity is natural to woman. This is strikingly apparent from the earliest age. The care bestowed upon the doll by the child is evidently but a beginning of this physiological demand, for the mature woman is but the accentuated child. She has outgrown the doll with its miniature cradle and baby carriage which gave so much pleasure and yearns for a child of her own, flesh of her flesh, blood of her blood. This desire of maternity is one of nature's laws. An attachment to some constant object is demanded which is to last through life, and in maternity is again the babe to be followed by the doll, make-believe housekeeping all to the end that such wise laws as

governs our existence may be again and again made active. The Master gives us some beautiful examples of perfect love and enduring attachment. Rosalind, Ophelia, Desdemona, Viola, Olivia and our sweet Juliet. These are the women to whom men can bear eternal allegiance, it is not to the Ladies Macbeth.

Cæsar. Let me have men about me that are fat;
Sleek-headed men, and such as sleep o' nights:
Yond Cassius has a lean and hungry look;
He thinks too much: such men are dangerous.
—*Julius Cæsar, Act I., Sc. 2.*

Falstaff. Will you tell me, master Shallow, how to choose a man? Care I for the limb, the thewes, the stature, bulk and big assemblance of a man! Give me the spirit, master Shallow.—Here's Wart;—you see what a ragged appearance it is: he shall charge you, and discharge you, with the motion of a pewterer's hammer; come off, and on, swifter than he that gibbets on the brewer's bucket. And the same half-faced fellow, Shallow,—give me this man; he presents no mark to the enemy; the foeman may with as great aim level at the edge of a penknife. And, for a retreat,—how swiftly will this Feeble, the woman's tailor run off! O, give me the spare man, and spare me the great ones.
—*Part Second, King Henry Fourth, Act III., Sc. 2.*

The best and most enduring soldiers are those of spare build.

Bassanio. How many cowards, whose hearts are all as false
As stayers of sand, wear yet upon their chins
The beards of Hercules and frowning Mars,
Who inward search'd have livers white as milk.
—*Merchant of Venice, Act III., Sc. 2.*

In the folio edition "Stayers of sand" appears instead of stairs in the quarto. Stayers seems to convey the meaning rather than stairs. Stair is from the Anglo-Saxon *stigan* to ascend, while stay—thence stayer—from the Teutonic *stehen,* to stand. Here are cowards, not stayers. "Stayers of sand" mean vain defenses of sand to be easily overthrown, notwithstanding they represent men with warlike beards and frames.

Shylock. Some men there are love not a gaping pig;
Some, that are mad if they behold a cat;

And others, when the bagpipe sings i' the nose,
Cannot contain their urine; for affection,
Master of the passions, sways it to the mood
Of what it likes, or loathes. Now for your answer.
As there is no firm reason to be render'd,
Why he cannot abide a gaping pig;
Why he, a harmless necessary cat;
Why he a woollen bagpipe,—but of force
Must yield to such inevitable shame,
As to offend, himself being offended;

—*Merchant of Venice, Act IV., Sc. 4.*

Numerous historic references could be cited of the eccentricities of men, and Shakspere but refers to what is well recognized by the medical man.

Malvolio. This does make some obstruction in the blood,
This cross-gartering.

—*Twelfth Night, Act III., Sc. 4.*

Those who for fashion's sake war upon nature, must needs pay the penalty.

Menenius. He was not taken well; he had not dined:
The veins unfill'd, our blood is cold and then
We pout upon the morning, are unapt
To give or to forgive; but when we have stuff'd
These pipes and these conveyances of our blood
With wine and feeding, we have suppler souls
Than in our priest-like fasts; therefore I'll watch him
'Till he be dieted to my request,
And then I'll set upon him.

—*Coriolanus, Act V., Sc. 1.*

Menenius had evidently made the acquaintance of the post-prandial temper of the good liver.

Hamlet. I'll tent him to the quick; if he do blench,
I know my course.

—*Hamlet, Act III., Sc. 2.*

To tent or probe, in this instance refers to an attack on the King's conscience; to accuse him of his supposed crime. If he do blench (blanch) turn white or pale with fear at the

accusing, Hamlet will be convinced of his guilt and know what course to pursue.

King John. Or if that surly spirit, melancholy,
Had bak'd thy blood, and made it heavy, thick;
(Which, else, runs trickling up and down the veins,
Making that idiot, laughter, keep men's eyes,
And strain their cheeks to idle merriment,
A passion hateful to my purposes;)
—*King John, Act III., Sc. 3.*

The reader will refer to the comments on the circulation of the blood on page 61.

Adam. Though I look old, yet I am strong and lusty;
For in my youth I never did apply
Hot and rebellious liquor in my blood;
Nor did not with unbashful forehead woo
The means of weakness and debility;
Therefore my age is as a lusty winter,
Frosty but kindly:
—*As You Like It, Act II., Sc. 2.*

What a temperance lecture is here given us.

Antony. What, girl? though gray
Do something mingle with our young brown;
Yet ha' we a brain that nourishes our nerves,
And can get goal for goal of youth.
—*Antony and Cleopatra, Act IV., Sc. 8.*

Comment is unnecessary.

Duchess. Have we more sons? or are we like to have?
Is not my teeming date drank up with time?
And wilt thou pluck my fair son from mine age,
And rob me of a happy mother's name?
—*King Richard Second, Act V., Sc. 2.*

Cessation of childbearing and approach of the menopause.

Jacques. All the world's a stage,
And all the men and women merely players:

They have their exits, and their entrances;
And one man in his time plays many parts,
His acts being seven ages. At first, the infant,
Mewling and puking in the nurse's arms;
Then the whining school-boy, with his satchel,
And shining morning face, creeping like snail
Unwillingly to school; and then, the lover,
Sighing like furnace, with a woeful ballad
Made to his mistress' eyebrow: then, a soldier;
Full of strange oaths, and bearded like a pard,
Jealous in honor, sudden and quick in quarrel,
Seeking the bubble reputation
Even in the cannon's mouth: and then, the justice;
In fair round belly, with good capon lin'd,
With eyes severe, and beard of formal cut,
Full of wise saws and modern instances,
And so he plays his part: The sixth age shifts
Into the lean and slipper'd pantaloon;
With spectacles on nose, and pouch on side;
His youthful hose well sav'd, a world too wide
For his shrunk shank; and his big manly voice,
Turning towards childish treble, pipes
And whistles in his sound: last scene of all,
That ends this strange eventful history,
Is second childishness, and mere oblivion;
Sans teeth, sans eyes, sans taste, sans everything.

—*As You Like It, Act II., Sc. 7.*

From birth to senile decay. This marvellously constructed history of man is inserted, as it gives us all of life from the cradle to the grave, with so much of truth, that it may as properly have place in a work of this kind as some quotations whose meaning is rather obscure.

Pinch. Give me your hand, and let me feel your pulse.

—*Comedy of Errors, Act IV., Sc. 4.*

Host. :—— your pulsidge beats as extraordinarily as heart would desire.

—*Part Second, King Henry Fourth, Act II., Sc. 4.*

Alonzo. ——thy pulse
Beats, as of flesh and blood;

—*Tempest, Act V., Sc. 1.*

Pericles. But are you flesh and blood?
Have you a working pulse? and are no fairy-motion?
—*Pericles, Act V., Sc. 1.*

HYGIENE AND DIETETICS.

Longsville. Fat paunches have lean pates; and dainty bits
Make rich the ribs, but banker out the wits.
Love's Labour Lost, Act I., Sc. 1.

King. So it is, besieged with sable-colored melancholy, I did commend the black-oppressing humour to the most wholesome physic of thy health-giving air; and, as I am a gentleman, betook myself to walk.
—*Love's Labour Lost, Act I., Sc. 1.*

Biron. Say, can you fast? your stomachs are too young;
And abstinence engenders maladies.
* * * * * * * * *
Why, universal plodding prisons up
The nimble spirits in the arteries.
—*Love's Labour Lost, Act IV., Sc. 3.*

Titania. ———, have sucked up from the sea,
Contagious fogs.
* * * * * * * *
****———: and the green corn
Hath rotted ere his youth attain'd a beard:
The fold stands empty in the drowned field.
And crows are fatted with the murrion flock;
The nine men's morris is filled up with mud;
And the quaint mazes in the wanton green,
For lack of tread, are undistinguishable:
The human mortals want; their winter here,
No night is now with hymn or carol blest:—
That rheumatic diseases do abound:
And through this distemperature, we see
The seasons alter; hoary-headed frosts
Fall in the fresh lap of the crimson rose;
And on old Hyem's thin and icy crown,
An odorless chaplet of sweet summer buds,
Is, as in mockery set: The spring, the summer,

The childing autumn, angry winter, change
Their wonted liveries.
—*Midsummer Night's Dream, Act II., Sc. 2.*

Evidently a very unhealthy place.

Demitrius. But, like in sickness, did I loathe this food
But, as in health, come to my natural taste,
Now do I wish it, love it, long for it,
And will for evermore be true to it.
—*Midsummer Night's Dream, Act IV., Sc. 1.*

Sir Andrew. Methinks sometimes I have no more wit than a Christian or an ordinary man has; but I am a great eater of beef, and I believe that does harm to my wit.
.—*Twelfth Night, Act I., Sc. 5.*

We find a reference to the effects of beef eating also in Troilus and Cressida, Act II. "Thou mongrel beef-witted lord!" while "with no more wit than an ox" is often quoted. Halliwell quotes Borde in the Regyment of Healthe 1567 (Regimen of Health) "Beefe is good meate for an Englyshman, so be it the beeste be yonge, and that it be not cow flesshe, for old beefe and cowe flesshe doth engendre melancholy and leprouse humours." All of which would lead us to understand that a too constant diet of beef was not conducive to a perfect or active mental state or to a quick wit.

Nerissa. And yet, for aught I see, they are as sick that surfeit with too much, as they that starve with nothing: It is no small happiness, therefore to be sated in the mean; superfluity comes sooner by white hairs, but competency lives longer.
—*Merchant of Venice, Act I., Sc. 2.*

This aphorism applies to-day as well as in Shakspere's time.

Second Lord. But I am sure, the younger of our nature,
That surfeit on their ease, will, day by day,
Come here for physic.
—*All's Well That Ends Well, Act III., Sc. 1.*

The medicine meant here is not necessarily a cathartic.

Petruchio. I tell thee, Kate, 'twas burnt and dried away;
And I expressly am forbid to touch it,
For it engenders choler, planteth anger;
And better 'twere that both of us did fast,
Since of ourselves, ourselves are choleric,
Than feed it with such over-roasted flesh.
—*Taming of the Shrew, Act IV., Sc. 1.*

We have here the mental effect rather than the physical in being compelled to eat of "burnt meat."

Clown. ————; that such a one, and such a one, were past cure of the things you wot of, unless they keep very good diet.
—*Measure for Measure, Act II., Sc. 1.*

Hotspur. ————; worse than the sun in March,
This praise doth nourish agues.
—*Part First, King Henry Fourth, Act IV., Sc. 1.*

Falstaff. ————, for I'll purge, and leave sack and live cleanly, as a nobleman should do.
—*Part First, King Henry Fourth, Act V., Sc. 5.*

Even to this day it is thought that purging and tonics or blood purifiers taken in the spring prepares one to enjoy good health the rest of the year.

Falstaff. There's never any of these demure boys come to any proof; for thin drink doth so over-cool their blood, and making many fish-meals, that they fall into a kind of male green-sickness; and then, when they marry, they get wenches; they are generally fools and cowards;—which some of us should be too, but for inflammation.

* * * * * * * * * * * *

If I had a thousand sons, the first human principle I would teach them should be,—to forswear thin potations, and to addict themselves to sack.
—*Part Second, King Henry Fourth, Act IV., Sc. 3.*

There is no need nowadays to teach young men "to forswear thin potations." The omnipresent cocktail could not be considered such.

Cardinal Wolsey. Sir,
For holy offices I have a time; a time
To think upon the part of business, which
I hear i' the state; and nature doth require
Her time of preservation, which, perforce,
I, her frail son, amongst my brethren mortal,
Must give my tendance to.
—*King Henry Eighth, Act III., Sc. 2.*

Timon. (To Alcibiades) Be as planetary plague, when Jove
Will o'er some high vic'd city hang the poison
In the sick air.
—*Timon of Athens, Act IV., Sc. 3.*

Hastings. The king is sickly, weak, and melancholy,
And his physicians fear him mightily.
Gloster. O, he hath kept an evil diet long,
And over much consumed his royal person;
—*King Richard Third, Act I., Sc. 1.*

Coriolanus. Bid them wash their faces,
And keep their teeth clean,—
—*Coriolanus, Act II., Sc. 3.*

Coriolanus. ———, against those measles
Which we disdain should tetter us, yet sought
The very way to catch them.
—*Coriolanus, Act III., Sc. 1.*

Portia. What mean you? Wherefore rise you now?
It is not for your health thus to commit
Your weak condition to the raw-cold morning.
* * * * * * * *
Is Brutus sick? and is it physical
To walk unbraced, and suck up the humours
Of the dank morning? What, is Brutus sick,
And he will steal out of his wholesome bed,
To dare the vile contagion of the night?
And tempt the rheumy and unpurged air
To add unto his sickness?
—*Julius Cæsar, Act II., Sc. 1.*

Recent experiments and researches show that malaria is not found

alone in the "humours of the dank morning" but that it results through the agency of mosquitoes. Brutus, however, must needs meet with the conspirators.

S. Pompeius. But all the charms of love,
Salt Cleopatra, soften thy wan'd lips!
Let witchcraft join with beauty, lust with both!
Tie up the libertine in a field of feasts;
Keep his brain fuming; Epicurean cooks
Sharpen with cloyless sauce his appetite;
That sleep and feeding may prorogue his honour,
Even till a Lethe'd dulness.

—Antony and Cleopatra, Act II., Sc. 1.

King. Haply, the seas, and countries different,
With variable objects, shall expel
This something-settled matter in his heart;
Whereon his brains still beating, puts him thus
From fashion of himself.

—Hamlet, Act III., Sc. 1.

As in Shakspere's day, now we advise a change of scenery and air for the invalid. A sea voyage is often sufficient to cure many obscure troubles while an absence from domestic and business cares is conducive to a return of health.

ETHICS.

Mrs. Quickly. Nay, said I, will you cast away your child on a fool and a physician?

—Merry Wives of Windsor, Act III., Sc. 4.

King. But may not be so credulous of cure,
When our most learned doctors leave us; and
The congregated college has concluded
That laboring art can never ransom nature
From her inaidable estate,—I say we must not
So strain our judgment, or corrupt our hope,
To prostitute our past cure malady
To empirics; or to dissever so

Our great self and our credit, to esteem
A senseless help, when help past sense we deem.
—*All's Well That Ends Well, Act III., Sc. 1.*

The King had evidently no confidence in quacks but was willing to trust himself to those of the "congregated college" or the educated physician.

Song. The sceptre, learning, physic, must
All follow this, and come to dust.
—*Cymbeline, Act IV., Sc. 2.*

The King, the scholar and the physician must all die; Shakspere places the physician in good company, certainly, and rightly so.

Cymbeline. Whom worse than a physician.
Would this report become? But I consider,
By medicine life may be prolonged, yet death
Will seize the doctor too.—
—*Cymbeline, Act V., Sc. 5.*

Pericles. Thou speak'st like a physician, Helicanus;
Who minister'st a potion unto me
That thou would'st tremble to receive thyself.
—*Pericles, Prince of Tyre, Act I., Sc. 2.*

Kent. Kill thy physician, and the fee bestow
Upon the foul disease.
—*King Lear, Act I., Sc. 1.*

MEDICAL JURISPRUDENCE.

Polixenses. Is not your father grown incapable
Of reasonable affairs? Is he not stupid
With age and altering rheums? Can he speak? hear?
Know man from man? dispute his own estate?
Lies he not bed-rid? and again does nothing,
But what he did being childish?
—*Winter's Tale, Act IV., Sc. 3.*

Warwick. See, how the blood is settled in his face!
Oft have I seen a timely-parted ghost,*
Of ashy semblance, meager, pale, and bloodless,
Being all descended to the laboring heart;
Who, in the conflict that it holds with death,
Attracts the same for aidance 'gainst the enemy;
Which with the heart there cools, and ne'er returneth
To blush and beautify the cheek again.
But see, his face is black, and full of blood;
His eyeballs further out than when he liv'd,
Staring full ghastly like a strangled man:
His hair uprear'd, his nostrils stretch'd with struggling;
His hands abroad display'd, as one that gasp'd
And tugg'd for life, and was by strength subdued.
Look on the sheets, his hair, you see, is sticking;
His well-proportion'd beard made rough and rugged,
Like the summer's corn by tempest lodg'd
It cannot be but he was murder'd here;
The least of all these signs were probable.

—*Part Second, King Henry Sixth, Act III., Sc. 2.*

Here again is shown the marvellous versatility of Shakspere, for no clearer or more exact description is given anywhere and with such detail of a case of sudden death, without apparent wound, bruise or the suspicion of poison.

*Corse.

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MAY 20 1962
REC'D LD
MAY 20 1962
7 Jun'62-2
REC'D LD
JUN 6 1962

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